

# Professionals Trust Pomona Performance

Test and Measurement • Telecom Calibration • RF • Automotive Audio/Video/Broadcast





For over 60 years the name Pomona Electronics has been synonymous with reliability and outstanding value.

We are proud to have built our reputation for the delivery of quality products by using only the finest materials available and designing to match real world applications...where you live—everyday. Pomona Electronics is proud to be there, at your side.

Pomona's quality connectors and test accessories are the one answer you need when a reliable signal is demanded.

#### For Distributor Locations:

United States and International www.pomonaelectronics.com

## **Europe** www.pomona.cc

Technical Support

U.S.

technicalsupport@pomonatest.com

**Europe** +31(0) 40 2675 150

Rest of World 1-425-446-5500

RoHS

- 4 New Products
- 6 Customized Products
- 7 Coaxial Cable Assemblies and Breakouts
- 17 RF Coaxial Connectors, Adapters and Kits
- 31 Banana Plugs and Jacks
- 45 Patch Cords and Test Leads
- 54 Calibration Kit
- 55 Boxes and Enclosures
- 60 DMM Accessories and Kits
- 74 Grabbers and Test Clips
- 76 SMD/Micro Format Test
- 80 Oscilloscope Probes and Accessories
- 82 Audio/Video/Broadcast
- 84 Automotive
- 85 IC Test Clips and Adapters
- 87 Static Control Products
- 89 Telecom Products
- 91 Category Index
- 95 Technical Support



For electronics engineers and technicians who need to get an electronic signal reliably from one device to another, Pomona provides a breadth of high-quality, accurate connectors, adapters, and cables. Pomona offers a broad array of precision products to meet the entire spectrum of electronics applications.

### **Pomona Electronics**

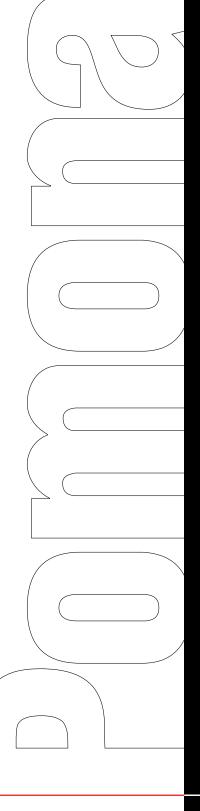
#### The engineers' choice for cables, connectors, and adapters

Since 1951, Pomona Electronics has been the go-to supplier for bench engineers and technicians, field technicians, and product designers who need reliable cables, connectors, and adapters for everything from the latest electronics to legacy devices. The company's innovative design and high-quality manufacturing provide engineers and technicians with tools that keep pace with constantly changing technologies and comply with both CSA and IEC61010 safety standards.

Pomona has a broad line of connection and test accessories for applications ranging from engineering research to test labs, field service, and plant maintenance. Pomona test accessories includes banana plugs and jacks, coaxial cable assemblies, patch cords, oscilloscope probes, DMM test lead kits and accessories, IC test clips, aluminum boxes, RF connectors, XLR connectors, and RF cable assembly products.

From tiny probes to cutting-edge voice-activated automotive systems and micro grabber test clips to verify sound systems that support the biggest names in music, Pomona Electronics has connectors and cable assemblies for the entire spectrum of electronics application. That's why Pomona is the choice of engineers and technicians for reliable, state-of-the-art products that make their jobs easier.







### **New Products**

Pomona is continually developing new products to meet the rapidly expanding needs of the market. New products introduced includes a new test lead set, a line of do-it-yourself banana plugs, top-loading binding posts, and alligator clips.



Also available are newly designed alligator clips that are fully insulated with flexible boots and are rated up to CAT II 1000V, 10A. These new alligator clips adapt to either 4mm sheathed banana plug test leads or most of Pomona's 2mm probe tips for test versatility.





#### **Introducing New Pomona Do-It-Yourself** 4mm banana plugs



Designed for quick and convenient wire attachment. These banana plugs feature spring-loaded push-button tabs for easy cable assembly or test lead repair. They are great in low voltage applications where prototyping and quick wire attachments are important. Available in a variety of 4mm banana plug styles that include unshrouded, stackable, fixed shroud, and retractable shroud.

All shown on page 35

73090 DIY 4mm **Banana Plug for Quick Wire Attachment** 



73091 DIY Sheathed 4mm Banana Plug for Quick Wire **Attachment** 



73092 DIY Stackable 4mm Banana Plug for Quick Wire **Attachment** 



73093 DIY **Retractable Sheath** 4mm Banana **Plug for Quick** Wire Attachment, **Stackable** 





#### Binding Post with 4mm Safety Jack and Quick Wire Connection

#### Model 73095

(available in black and red)

- Insulated 4mm safety jack for sheathed plugs
- Spring-loaded for quick wire connection through the cross hole
- · Ideal for panel mounting
- CAT II 600V, 32A

# Right-Angle 4mm Mounting Safety Jack for PCB

#### Model 73099

(available in black and red)

- Right-angle configuration minimizes force required to plug in test leads
- · Ideal for mounting on PCB
- Insulated 4mm safety jack for sheathed plugs
- CAT III 1000V/CAT IV 600V, 24A

# 4mm Mounting Safety Jack for Sheathed Banana Plugs

#### **Model 73098**

(available in black, red and blue)

- Insulated 4mm safety jack for sheathed plugs
- Ideal for panel mounting
- CAT II 1000V, 32A



### 4mm Safety Jack for PCB

#### **Model 73096**

(available in black and red)

- Ideal for mounting on vertical PCB
- Insulated 4mm safety jack for sheathed plugs
- CAT III 1000V/CAT IV 600V, 24A

#### Panel Mount Double 4mm Banana Jack

#### Model 73101-0

- Insulated 4mm
   Double Banana Jack
- Ideal for screw-mounting onto pre-drilled panels
- 30 Vac/60 Vdc, 25A

### BNC (M) Breakout to Flying Leads

#### Model 73105

- Insulated BNC male connector
- 25cm length
   flying leads for
   custom configurations
- 30 Vac/60 Vdc, 3A



# Right-Angle Magnetic Probe, 6.6mm dia.

#### **Model 73106**

(available in black, red and blue)

- Ideal for temporary connections to terminal blocks with metal screws
- Quick connect and disconnect with magnetic probe head
- Insulated 4mm safety jack for sheathed banana plugs
- CAT III 1000V/CAT IV 600V, 4A

## Maxigrabber, Reinforced Insulation

#### Model 73103

(available in black and red)

- Designed for connections to high current conductors
- Reinforced insulated hook clip for increased safety
- 12mm opening
- CAT II/CAT III/CAT IV 1000V Rated, 20A



## DIY Insulated BNC Connector, $50\Omega$

#### Model 73104

(available in black, red and blue)

- Designed for increased electrical protection
- Rated to CAT II 1000V/ CAT III 600V
- 50Ω Impedance





### **Customized Products**

Pomona responds to a wide range of special or custom requirements by providing accessories tailored to your needs. Whether we simply modify an existing catalog product or create a unique combination of products, we use only the finest materials to deliver top quality products.

Think of the possibilities!
You can now define your
own custom product or kit
made of many combinations
of cables, wires, connectors,
or probes in this catalog.
Can't find the length or color
you need? Pomona makes
it easy. Want a unique
combination of connectors
and cables you just can't find
anywhere? Just ask Pomona!





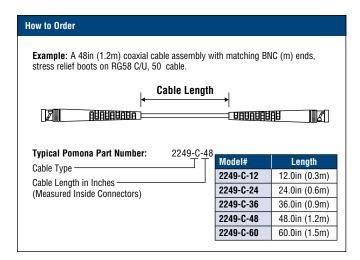
Combinations of coaxial connector/ adapter assemblies can include strain-relief sheathing, marking and lengths.

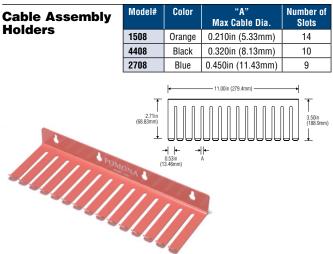
To order your Pomona Product, please select **[Custom Products]** and fill out the request form on our Pomona Electronics website.





Pomona is the professional's choice, whether in the lab, plant or in the field. Using high-quality materials such as beryllium copper, gold and nickel plating ensures the precision you rely on. With a huge selection of cables and breakouts offering almost every connector and clip combination, Pomona provides you the solution for any application.





#### **Technical Specifications for Wire and Cable**

| Cable<br>Designation | Туре                                    | Impedance<br>Ω | Capacitance<br>per 1ft/<br>0.304m | Insulation/<br>Dielectric | AWG | Stranding<br>Strands<br>X AWG | Wire<br>Type | Jacket<br>Material | Cable O.D.       | Shield         | Temperature<br>(w/o connectors) |
|----------------------|---|----------------|-----------------------------------|---------------------------|-----|-------------------------------|--------------|--------------------|------------------|----------------|---------------------------------|
| A                    | twisted pair,<br>2 conductor            | NA             | 27.0 pf                           | PVC                       | 18  | 65X36                         | TC           | PVC                | 0.25in (6.35mm)  | NA             | -4 to 221°F (-20 to +105°C)     |
| С                    | Coax, RG58C/U                           | 50             | 32.2 pf                           | PE                        | 20  | 19X33                         | TC           | PVCNC              | 0.195in (4.95mm) | TCB            | -40 to 185°F (-40 to +85°C)     |
| E                    | Coax, RG59B/U                           | 75             | 22.0 pf                           | PE                        | 23  | Solid                         | BCCS         | PVCNC              | 0.242in (6.15mm) | BCB            | -40 to 140°F (-40 to +60°C)     |
| J                    | Microphone,<br>2 conductor,<br>shielded | 90             | 18 / 32 pf*                       | PE                        | 22  | 16X34                         | TC           | PVC                | 0.231in (5.84mm) | TCB            | -40 to 176°F (-40 to +80°C)     |
| K                    | Coax, RG174/U                           | 50             | 30.8 pf                           | PE                        | 26  | 7X34                          | BCCS         | PVC                | 0.110in (2.79mm) | TCB            | -40 to 167°F (-40 to +75°C)     |
| Т                    | Coax, RG214/U                           | 50             | 30.8 pf                           | PE                        | 13  | 7X22                          | SPC          | PVCNC              | 0.425in (10.8mm) | SCCB/<br>SCCB  | -40 to 176°F (-40 to +80°C)     |
| Х                    | Coax, RG142B/U                          | 50             | 29.0 pf                           | TFE                       | 18  | Solid                         | SPCCS        | FEP                | 0.195in (4.05mm) | SPC/SPC        | -94 to 392°F (-70 to +200°C)    |
| Υ                    | Coax, RG223/U                           | 50             | 30.8 pf                           | PE                        | 19  | Solid                         | SPC          | PVCNC              | 0.212in (5.38mm) | SCB/SCB        | -40 to 140°F (-40 to +60°C)     |
| BB                   | Coax, RG316/U                           | 50             | 29.0 pf                           | TFE                       | 26  | 7X37                          | SPCCS        | FEP                | 0.096in (2.44mm) | SPC            | -94 to 392°F (-70 to +200°C)    |
| SS                   | Coax, RG58/U,<br>low noise              | 50             | 37.0 pf                           | CPE/PE                    | 22  | 7X30                          | TC           | PVC                | 0.195in (4.95mm) | BAF/TCB        | -40 to 176°F (-40 to +80°C)     |
| UU                   | Coax, RG178B/U                          | 50             | 29.0 pf                           | PTFE                      | 16  | 7X.1                          | SPCCS        | FEP                | 0.071in (1.8mm)  | SPC            | -67 to 311°F (-55 to +155°C)    |
| V                    | Coax, RG59/U                            | 75             | 20.4 pf                           | PE                        | 23  | Solid                         | BCCS         | PVC                | 0.242in (6.15mm) | BCB            | -40 to 176°F (-40 to +80°C)     |
| VV                   | Coax, RG179B/U                          | 75             | 19.5 pf                           | PTFE                      | 12  | 7X.1                          | SPCCS        | FEP                | 0.100in (2.54mm) | SPC            | -67 to 311°F (-55 to +155°C)    |
| Triaxial             | Coax, RG 58A/U,<br>double shielded      | 50             | 30.8 pf                           | PE/PE                     | 20  | 7X28                          | TC           | PVC                | 0.240in (6.10mm) | TCB/<br>TCB-40 | to 167°F (-40 to +75°C)         |

 $<sup>^{\</sup>star}$  Capacitance between conductors / Capacitance between conductor and shield

AWG = American Wire Gauge BAF = Bonded Aluminum Foil Polyester Tape

BCB = Bare Copper Braid

BCCS = Bare Copper Covered Steel CPE = Conductive Polyethylene

FEP = Fluorinated Ethylene Propylene

OD = Outside Diameter

NA = Not Applicable

PE = Polyethylene

PVC = Polyvinyl Chloride

PVCNC = Polyvinyl Chloride Non Contaminating

SCB = Silver Coated Braid

SPC = Silver Plated Copper

SCCB = Silver Coated Copper Braid

SPCCS = Silver Plated Copper Covered Steel

SSPE = Semi-Solid Polyethylene

TC = Tinned Copper

TCB = Tinned Copper Braid

TFE = Tetrafluoroethylene

Ratings: The components in this section have a hands free rating for use in controlled voltage environments. However, for CE compliance these products are not intended for hand held use at voltages above 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum.

### **BNC Male Cable with Molded Strain Relief**



**Rating:** Maximum voltage for *hands free use*: 500 Vrms $^*$ , +122 $^\circ$ F (+50 $^\circ$ C) max., ("Y" Cable 176 $^\circ$ F (+80 $^\circ$ C).)

**BNC:** Body: tarnish resistant nickel-plated brass; Center Contact: gold-plated brass; Dielectric: PTFE.

**Strain Relief:** PVC molded directly to cable and connectors. *See chart on page 7 for additional wire and cable specifications.* 

| Length       | 50Ω Cable O.D.<br>.195in (4.95mm)<br>RG58C/U | 50Ω Cable O.D.<br>.206in (5.23mm)<br>RG223 | 75Ω Cable O.D.<br>.242in (6.15mm)<br>RG59B/U | 50Ω Cable O.D.<br>.100in (2.54mm)<br>RG174/U | 50Ω Cable O.D.<br>.195in 4.95mm)<br>RG58C/U |
|--------------|--|--|--|--|---|
| .5ft (0.2m)  | 2249-C-6                                     | -  | 2249-E-6                                     | 2249-K-6                                     | -   |
| 1ft (0.3m)   | 2249-C-12                                    | 2249-Y-12                                  | 2249-E-12                                    | 2249-K-12                                    | -   |
| 2ft (0.6m)   | 2249-C-24                                    | 2249-Y-24                                  | 2249-E-24                                    | 2249-K-24                                    | -   |
| 3ft (0.9m)   | 2249-C-36                                    | 2249-Y-36                                  | 2249-E-36                                    | 2249-K-36                                    | -   |
| 4ft (1.2m)   | 2249-C-48                                    | 2249-Y-48                                  | 2249-E-48                                    | 2249-K-48                                    | -   |
| 5ft (1.5m)   | 2249-C-60                                    | 2249-Y-60                                  | 2249-E-60                                    | 2249-K-60                                    | 5266-C-60                                   |
| 6ft (1.8m)   | 2249-C-72                                    | 2249-Y-72                                  | 2249-E-72                                    | 2249-K-72                                    | -   |
| 8ft (2.4m)   | 2249-C-96                                    | 2249-Y-96                                  | -  | 2249-K-96                                    | -   |
| 10ft (3.0m)  | 2249-C-120                                   | 2249-Y-120                                 | 2249-E-120                                   | 2249-K-120                                   | ı   |
| 12ft (3.7m)  | 2249-C-144                                   | 2249-Y-144                                 | 2249-E-144                                   | -  | -   |
| 15ft (4.6m)  | 2249-C-180                                   | 2249-Y-180                                 | 2249-E-180                                   | 2249-K-180                                   | ı   |
| 20ft (6.1m)  | 2249-C-240                                   | 2249-Y-240                                 | 2249-E-240                                   | 2249-K-240                                   | -   |
| 25ft (7.6m)  | 2249-C-300                                   | 1  | 2249-E-300                                   | 2249-K-300                                   | -   |
| 30ft (9.1m)  | 2249-C-360                                   | _  | 2249-E-360                                   | _  | _   |
| 50ft (15.2m) | 2249-C-600                                   | -  | 2249-E-600                                   | -  | -   |

 $\label{eq:model_2249-C} \mbox{Model 2249-C} \mbox{ is Pomona Electronics'} \\ \mbox{most popular cable. The } 50\Omega \\ \mbox{RG58C/U cable makes it ideal for most} \\ \mbox{test and measurement applications.}$ 

Model 2249-Y is a  $50\Omega$  RG223/U cable with double shield. Use when additional shielding is required.

**Model 2249-E** RG59B/U is a  $75\Omega$  cable, making it the right choice for use with TV, video and LAN applications.

**Model 2249-K** RG174/U offers superior flexibility in a  $50\Omega$  cable.

Model 5266-C is the same high quality construction as Model 2249-C with a connector on (one end only.)

#### **BNC Male Low-Noise Cable**



| Model#      | Lengtn       |
|-------------|--------------|
| 4964-SS-12  | 12in (0.3m)  |
| 4964-SS-24  | 24in (0.6m)  |
| 4964-SS-36  | 36in (0.9m)  |
| 4964-SS-48  | 48in (1.2m)  |
| 4964-SS-60  | 60in (1.5m)  |
| 4964-SS-72  | 72in (1.8m)  |
| 4964-SS-120 | 120in (3.0m) |
| 4964-SS-240 | 240in (6.1m) |

Model 4964-SS uses a special lowtriboelectric cable which has noise attenuating layers surrounding the center conductor. The cable is ideal for low power, low frequency measurements.

**Recommended Frequency Range:** DC to 10KHz.

**BNC:** *Body:* tarnish resistant nickelplated brass; *Center Contact:* gold-plated brass; *Dielectric:* PTFE.

**Strain Relief:** PVC molded directly to cable and connectors.

See chart on page 7 for additional wire and cable specifications.

### BNC Male True 75 $\Omega$ High Flex Cable



| Model#      | Length      |
|-------------|-------------|
| 6510-V-12-0 | 12in (0.3m) |
| 6510-V-24-0 | 24in (0.6m) |
| 6510-V-36-0 | 36in (0.9m) |
| 6510-V-48-0 | 48in (1.2m) |
| 6510-V-60-0 | 60in (1.5m) |
| 6510-V-72-0 | 72in (1.8m) |

**Model 6510-V** uses a true  $75\Omega$  connector for superior VSWR and low return loss up to 3 GHz. The highly flexible RG59/U type cable has a gas injected foam polyethylene dielectric with PVC jacket for low loss and superior shield coverage. Highly flexible cable and molded strain relief prevent excessive bending or kinking. An ideal product for HDTV and digital video as well as test and measurement.

**Rating:** Maximum voltage for *hands free use*: 500 Vrms\*.

**BNC:** Body: tarnish resistant nickel-plated brass; Center Contact: gold-plated brass; Dielectric: PTFE.

**Strain Relief:** PVC molded directly to cable and connectors.

See chart on page 7 for additional wire and cable specifications.

### IEC Insulated BNC Male 50 $\Omega$ Cable



| Model#     | Length       |
|------------|--------------|
| 72926-C-40 | 40in (100cm) |
| 72926-C-80 | 80in (200cm) |

Rating: 500V CAT I, 150V CAT II, 3A.

Color: Black.



### BNC Male $50\Omega$ Cable: Field Servicable Connector



| Model#   | Length      |
|----------|-------------|
| BNC-C-18 | 18in (0.5m) |
| BNC-C-24 | 24in (0.6m) |
| BNC-C-36 | 36in (0.9m) |
| BNC-C-48 | 48in (1.2m) |
| BNC-C-60 | 60in (1.5m) |
| BNC-C-72 | 72in (1.8m) |

Clamp nut and silicone gasket seal out moisture. Gold-plated center contact and Teflon® insulation assure premium performance.

**Rating:** Maximum voltage for hands free use: 500 Vrms\*.

**BNC:** *Body:* tarnish resistant nickel-plated brass; *Center Contact:* gold-plated brass contact soldered to cable; *Dielectric:* PTFE.

See chart on page 7 for additional wire and cable specifications.

#### BNC Male $50\Omega$ Cable



| Model#   | Length       |
|----------|--------------|
| 5697-6   | 6in (0.2m)   |
| 5697-12  | 12in (0.3m)  |
| 5697-24  | 24in (0.6m)  |
| 5697-36  | 36in (0.9m)  |
| 5697-48  | 48in (1.2m)  |
| 5697-60  | 60in (1.5m)  |
| 5697-72  | 72in (1.8m)  |
| 5697-120 | 120in (3.0m) |
| 5697-180 | 180in (4.6m) |
| 5697-240 | 240in (6.1m) |

Rating: Maximum voltage for hands free use: 500 Vrms\*.

Cable Type:  $50\Omega$ , RG58 type 0.19in (4.95mm) 0.D.

**BNC:** *Body:* tarnish resistant nickel-plated brass; *Center Contact:* gold-plated brass contact crimped to cable; *Dielectric:* PTFE.

See chart on page 7 for additional wire and cable specifications.

24in (0.6m)

48in (1.2m)

60in (1.5m)

24in (0.6m)

48in (1.2m)

60in (1.5m)

12in (0.3m)

24in (0.6m)

36in (0.9m)

48in (1.2m)

60in (1.5m)

12in (0.3m)

24in (0.6m)

36in (0.9m)

48in (1.2m)

RG 316/U

4846-BB-24

4846-BB-48

4846-BB-60

**RG 142B/U** 

4846-X-24

4846-X-48

4846-X-60

RG 58C/U

4846-C-12

4846-C-24

4846-C-36

4846-C-48

4846-C-60

RG 178B/U

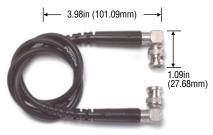
4846-UU-12

4846-UU-24

4846-UU-36

4846-UU-48

#### BNC Male Right Angle Connector Cable with Molded Strain Relief



| Model#    | Length      |
|-----------|-------------|
| 4276-C-12 | 12in (0.3m) |
| 4276-C-24 | 24in (0.6m) |
| 4276-C-36 | 36in (0.9m) |

Rating: Maximum voltage for hands free use: 500 Vrms\*.

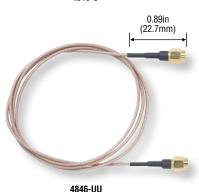
**BNC:** *Body:* tarnish resistant nickel-plated brass; *Center Contact:* gold-plated brass; *Dielectric:* PTFE.

**Strain Relief:** PVC molded directly to cable and connectors.

See chart on page 7 for additional wire and cable specifications.

#### SMA Male $50\Omega$ Cable





| 4040 1111 00 00: 44 5  |
|--|
| <b>4846-UU-60</b> 60in (1.5m   |
| SMA: Body/Fittings: passivated stainless steel or gold-plated brass; Contact: gold-plated bras Dielectric: PTFE. |

See chart on page 7 for additional wire and cable specifications.

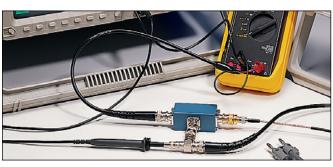
### BNC Male to BNC Male Right Angle $50\Omega$ Cable



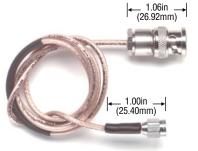
| Monei#    | Lengin      |
|-----------|-------------|
| 1383-C-24 | 24in (0.6m) |
| 1383-C-60 | 60in (1.5m) |
|           |             |

Rating: Maximum voltage for hands free use: 500 Vrms\*.

**BNC:** *Body:* tarnish resistant nickel-plated brass; *Center Contact:* gold-plated brass; *Dielectric:* PTFE.



#### BNC Male to SMA Male $50\Omega$ **Teflon Insulated Cable**



| RG 316/U   | Length      |
|------------|-------------|
| 4935-BB-24 | 24in (0.6m) |
| 4935-BB-48 | 48in (1.2m) |
| 4935-BB-60 | 60in (1.5m) |

Rating: Maximum voltage for hands free use: 335 Vrms\*.

SMA: Body /Fittings: passivated stainless steel; Contact: gold-plated brass; Dielectric: PTFE.

BNC: Body: tarnish resistant nickel- plated brass; Center Contact: gold-plated brass; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

#### MMCX Male 50 $\Omega$ Cable



| RG 316/U                   | Length                     |
|----------------------------|----------------------------|
| 73063-BB-6                 | 6in (0.15m)                |
| 73063-BB-24                | 24in (0.6m)                |
| 73063-BB-36                | 36in (0.9m)                |
| RG 178B/U                  | Length                     |
|                            |                            |
| 73077-UU-12                | 12in (1.5m)                |
| 73077-UU-12<br>73077-UU-24 | 12in (1.5m)<br>24in (1.8m) |
|                            | ` ′                        |
| 73077-UU-24                | 24in (1.8m)                |

Rating: Maximum voltage for hands free use: 500 V.

MMCX: Body/Fittings: gold-plated brass; Contact: gold-plated phosphor bronze; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

#### SMA Male to SMA Female



| RG 142B/U |             |
|-----------|-------------|
| 4528-X-24 | 24in (0.6m) |
| 4528-X-48 | 48in (1.2m) |

SMA: Body/Fittings: passivated stainless steel; Contact: gold-plated brass; Dielectric: PTFE.

SMA (F): gold-plated, beryllium copper center contact; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

#### MCX Male 75 $\Omega$ Cable



| RG 179B/U   | Length      |
|-------------|-------------|
| 73075-VV-12 | 12in (0.3m) |
| 73075-VV-24 | 24in (0.6m) |
| 73075-VV-36 | 36in (0.9m) |
| 73075-VV-48 | 48in (1.2m) |

Rating: Maximum voltage for hands free use: 750V.

MCX: Body/Fittings: gold-plated brass; Contact: gold-plated phosphor bronze; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

#### SMA Male to Type 'N' Male 50 $\Omega$ Cable



| Model#    | Length      |
|-----------|-------------|
| 5058-X-36 | 36in (0.9m) |
| 5058-X-48 | 48in (1.2m) |
| 5058-X-60 | 60in (1.5m) |

SMA: Body/Fittings: passivated stainless steel; Contact: gold-plated brass: Dielectric: PTFE.

**Type 'N':** *Body:* white bronze-plated brass; Center Contact: gold-plated brass; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

#### SMB Jack 75Ω Cable



| RG 179B/U   | Length      |
|-------------|-------------|
| 73072-VV-12 | 12in (0.3m) |
| 73072-VV-24 | 24in (0.6m) |
| 73072-VV-36 | 36in (0.9m) |
| 73072-VV-48 | 48in (1.2m) |
| 73072-VV-60 | 60in (1.5m) |

Rating: Maximum voltage for hands free use: 750V.

SMB: Body/Fittings: gold-plated brass; Contact: gold-plated brass; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

#### Type 'N' Male $50\Omega$ Cable



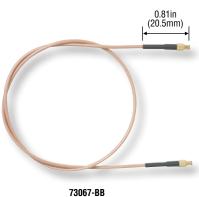
| Model#    | Length      |
|-----------|-------------|
| 1658-T-18 | 18in (0.5m) |
| 1658-T-24 | 24in (0.6m) |
| 1658-T-36 | 36in (0.9m) |
| 1658-T-48 | 48in (1.2m) |
| 1658-T-60 | 60in (1.5m) |

Rating: Maximum voltage for hands free use: 1,000 Vrms\*.

Type 'N': Body: white bronze-plated brass; Center Contact: gold-plated brass; Dielectric: PTFE.



#### MCX Male $50\Omega$ Cable



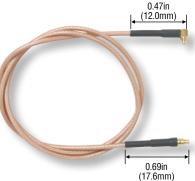
| RG 316/U      | Length                     |
|---------------|----------------------------|
| 73067-BB-6    | 6in (0.15m)                |
| 73067-BB-24   | 24in (0.6m)                |
| 73067-BB-36   | 36in (0.9m)                |
| RG 178B/U     | Length                     |
| 73075-UU-12   | 12in (1.2m)                |
| 73075-UU-24   | 24in (1.5m)                |
| 70075 1111 00 | 00: (4.0.)                 |
| 73075-UU-36   | 36in (1.8m)                |
| 73075-UU-48   | 36in (1.8m)<br>48in (3.0m) |

Rating: Maximum voltage for hands free use: 750V.

MCX: Body/Fittings: gold-plated brass; Contact: gold-plated phosphor bronze; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

#### **MMCX Male to MMCX Male** Right Angle 50 $\Omega$ Cable



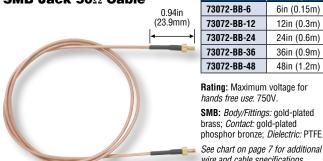
| RG 316/U    | Length      |
|-------------|-------------|
| 73064-BB-6  | 6in (0.15m) |
| 73064-BB-12 | 12in (0.3m) |
| 73064-BB-24 | 24in (0.6m) |

Rating: Maximum voltage for hands free use: 500V\*.

MMCX: Body/Fittings: gold-plated brass; Contact: gold-plated phosphor bronze; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

### SMB Jack 50Ω Cable



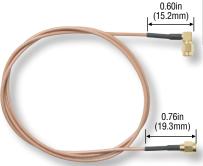
| RG 316/U    | Length      |
|-------------|-------------|
| 73072-BB-6  | 6in (0.15m) |
| 73072-BB-12 | 12in (0.3m) |
| 73072-BB-24 | 24in (0.6m) |
| 73072-BB-36 | 36in (0.9m) |
| 73072-BB-48 | 48in (1.2m) |

Rating: Maximum voltage for hands free use: 750V.

SMB: Body/Fittings: gold-plated brass; Contact: gold-plated phosphor bronze; Dielectric: PTFE.

wire and cable specifications.

#### **SMA Male to SMA Male** Right Angle 50 $\Omega$ Cable



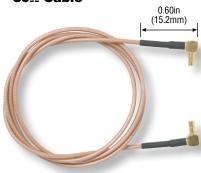
| RG 316/U    | Length      |
|-------------|-------------|
| 73069-BB-12 | 12in (0.3m) |
| 73069-BB-24 | 24in (0.6m) |
| 73069-BB-36 | 36in (0.9m) |
| 73069-BB-48 | 48in (1.2m) |
| 73069-BB-60 | 60in (1.5m) |

Rating: Maximum voltage for hands free use: 750V\*.

SMA: Body/Fittings: gold-plated brass; Contact: gold-plated brass; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

#### **SMB Jack Right Angle** 50 $\Omega$ Cable



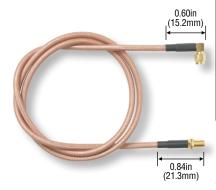
| KG 316/U    | Length      |
|-------------|-------------|
| 73073-BB-6  | 6in (1.5m)  |
| 73073-BB-12 | 12in (0.3m) |
| 73073-BB-24 | 24in (0.6m) |
| 73073-BB-36 | 36in (0.9m) |
| 73073-BB-48 | 48in (1.2m) |

Rating: Maximum voltage for hands free use: 750V.

SMB: Body/Fittings: gold-plated brass; Contact: gold-plated phosphor bronze; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

#### **SMA Male Right Angle** to SMA Female Bulkhead **50** $\Omega$ Cable



| RG 316/U    | Length      |  |
|-------------|-------------|--|
| 73071-BB-12 | 12in (0.3m) |  |
| 73071-BB-24 | 24in (0.6m) |  |
| 73071-BB-36 | 36in (0.9m) |  |
| 73071-BB-48 | 48in (1.2m) |  |
| 73071-BB-60 | 60in (1.5m) |  |
| RG 142B/U   |             |  |
| 73071-X-12  | 12in (0.3m) |  |
| 73071-X-24  | 24in (0.6m) |  |
| 73071-X-36  | 36in (0.9m) |  |
| 73071-X-48  | 48in (1.2m) |  |
| 73071-X-60  | 60in (1.5m) |  |
|             |             |  |

Rating: Maximum voltage for hands free use: 750V.

SMA: Body/Fittings: gold-plated brass; Contact: beryllium copper and brass, gold-plated; Dielectric: PTFE

#### MCX Male Right Angle 50 $\Omega$



| RG 316/U    | Length      |
|-------------|-------------|
| 73068-BB-6  | 6in (0.15m) |
| 73068-BB-12 | 12in (0.3m) |
| 73068-BB-24 | 24in (0.6m) |
| 73068-BB-36 | 36in (0.9m) |

Rating: Maximum voltage for hands free use: 750V\*.

SMA: Body/Fittings: gold-plated brass; Contact: gold-plated phosphor bronze; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

#### **MMCX Male to SMA Female** Bulkhead 50 $\Omega$ Cable



| RG 316/U    | Length                |
|-------------|-----------------------|
| 73065-BB-12 | 12in (0.3m)           |
| 73065-BB-24 | 24in (0.6m)           |
| 73065-BB-36 | 36in (0.9m)           |
| 73065-BB-48 | 48in (1.2m)           |
| DO 4700 (II |                       |
| RG 178B/U   | Length                |
| 73078-UU-12 | Length<br>12in (0.3m) |
|             |                       |
| 73078-UU-12 | 12in (0.3m)           |

Rating: Maximum voltage for hands free use: 500V.

MMCX: Body/Fittings: gold-plated brass; Contact: gold-plated phosphor bronze; Dielectric: PTFE.

SMA: Body/Fittings: gold-plated brass; Contact: gold-plated beryllium copper; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

#### **SMA Male to SMA Female** Bulkhead 50 $\Omega$ Cable



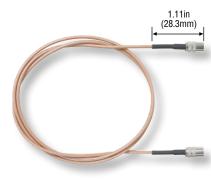
| RG 316/U    | Length      |  |
|-------------|-------------|--|
| 73070-BB-12 | 12in (0.3m) |  |
| 73070-BB-24 | 24in (0.6m) |  |
| 73070-BB-36 | 36in (0.9m) |  |
| 73070-BB-48 | 48in (1.2m) |  |
| 73070-BB-60 | 60in (1.5m) |  |
| RG 58C/U    |             |  |
| 73070-C-12  | 24in (0.6m) |  |
| 73070-C-24  | 24in (0.6m) |  |
| 73070-C-36  | 36in (0.9m) |  |
| 73070-C-48  | 48in (1.2m) |  |
| 73070-C-60  | 60in (1.5m) |  |

Rating: Maximum voltage for hands free use: 750V.

SMA: Body/Fittings: gold-plated brass; Contact: beryllium copper and brass, gold-plated; Dielectric: PTFE

See chart on page 7 for additional wire and cable specifications.

#### **SMA Male Quick-Connect 50** $\Omega$ Cable



| Length                     |
|----------------------------|
| 12in (0.3m)                |
| 24in (0.6m)                |
| 36in (0.9m)                |
| 48in (1.2m)                |
| 60in (1.2m)                |
|                            |
| Length                     |
| Length<br>12in (1.2m)      |
|                            |
| 12in (1.2m)                |
| 12in (1.2m)<br>24in (1.5m) |
|                            |

Rating: Maximum voltage for hands free use: 750V.

SMA: Body/Fittings: nickel-plated brass; Contact: gold-plated brass; Dielectric: PTFE

See chart on page 7 for additional wire and cable specifications.

#### SMA Male to SMA Male Quick-Connect 50Ω Cable



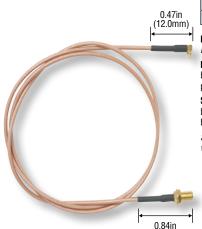
| RG 142B/U  | Length      |
|------------|-------------|
| 73082-X-12 | 12in (0.3m) |
| 73082-X-24 | 24in (0.6m) |
| 73082-X-36 | 36in (0.9m) |
| 73082-X-48 | 48in (1.2m) |
| 73082-X-60 | 60in (1.2m) |

Rating: Maximum voltage for hands free use: 750V.

SMA: Body/Fittings: brass, goldplated and nickel-plated; Contact: gold-plated brass; Dielectric: PTFE.

See chart on page 7 for additional wire and cable specifications.

#### **MMCX Male Right Angle to SMA Female Bulkhead** 50 $\Omega$ Cable



(21.3mm)

| RG 316/U    | Length      |
|-------------|-------------|
| 73066-BB-12 | 12in (0.3m) |
| 73066-BB-24 | 24in (0.6m) |
| 73066-BB-36 | 36in (0.9m) |
| 73066-BB-48 | 48in (1.2m) |

Rating: Maximum voltage for hands free use: 500V.

MMCX: Body/Fittings: gold-plated brass; Contact: gold-plated phosphor bronze; Dielectric: PTFE.

SMA: Body/Fittings: gold-plated brass; Contact: gold-plated beryllium copper; Dielectric: PTFE.



#### **Triaxial Male to Three Alligator Test Clips, Double** Shielded



| Model# | Cable Type | Lugs | Length      |
|--------|------------|------|-------------|
| 4725   | Triaxial   | 2    | 36in (0.9m) |
| 5342   | Triaxial   | 3    | 36in (0.9m) |

Rating: Maximum voltage for hands free use: 150 Vrms\*.

**Jaw Opening:** 0.30in (7.62mm) max.

Triaxial: Body/Fittings: tarnish resistant nickel-plated brass; Intermediate and Center Contacts: gold-plated brass; Dielectric: PTFE. See chart on page 7 for additional wire and cable specifications.

#### **BNC Male with Molded Strain Relief to** Micrograbber® Test Clips



| Length      |
|-------------|
| 24in (0.6m) |
| 36in (0.9m) |
| 24in (0.6m) |
| 36in (0.9m) |
| 48in (1.2m) |
|             |

Rating: Maximum voltage for hands free use: 150 Vrms\*.

BNC: Body: tarnish resistant nickel-plated brass; Center Contact: gold-plated brass; Dielectric: PTFE.

Strain Relief: PVC molded directly to cable and connectors

Micrograbber: Contacts: beryllium gold-plated copper; Insulation: glass filled nylon.

Colors: One black and one red. See chart on page 7 for additional wire and cable specifications.

#### **Triaxial Male Cables**



| Model#  | Cable Type | Lugs | Length      |
|---------|------------|------|-------------|
| 5223-36 | Triaxial   | 3    | 36in (0.9m) |
| 5223-60 |            | J    | 60in (1.5m) |
| 5054-36 | Triaxial   | 2    | 36in (0.9m) |
| 5054-60 |            | 2    | 60in (1.5m) |

Rating: Maximum voltage for hands free use: 500 Vrms\*.

Triaxial: Body/Fittings: tarnish resistant nickel-plated brass; Intermediate and Center Contacts: gold-plated brass; Dielectric: PTFE.

Cable Type: Double Shielded,  $50\Omega$ , RG58A/U.

Colors: 5223: Yellow, 5054: Yellow. Triaxial to BNC Adapters on page 29.

See chart on page 7 for additional wire and cable specifications.

#### **BNC Male with Molded Strain Relief to Alligator Test Clips**



| Model#    | Length       |
|-----------|--------------|
| 4531-C-18 | 18in (0.5m)  |
| 4531-C-24 | 24in (0.6m)  |
| 4531-C-30 | 30in (0.76m) |
| 4531-C-36 | 36in (0.9m)  |
| 4531-C-48 | 48in (1.2mm) |
| 4531-C-60 | 60in (1.5mm) |

Rating: Maximum voltage for hands free use: 150 Vrms\*.

Jaws Opening: 0.3in (7.62mm) max.

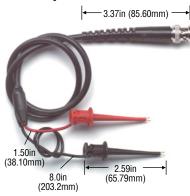
BNC: Body: tarnish resistant nickel-plated brass; Center Contact: gold-plated brass; Dielectric: PTFE.

Strain Relief: PVC molded directly to cable and connectors.

Alligator: Body: steel-plated nickel. Colors: Vinyl boots: one black and

See chart on page 7 for additional wire and cable specifications.

#### **BNC Male with Molded** Strain Relief to Minipincer® **Test Clips**



| Model#    | Length      |
|-----------|-------------|
| 5423-C-24 | 24in (0.6m) |
| 5423-C-36 | 36in (0.9m) |
| 5423-C-48 | 48in (1.2m) |

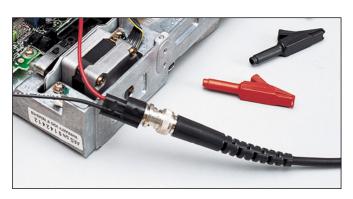
Rating: Maximum voltage for hands free use: 300 Vrms\*.

BNC: Body: tarnish resistant nickel-plated brass; Center Contact: gold-plated brass; Dielectric: PTFE.

Strain Relief: PVC molded directly to cable and connectors.

Minipincer: Contacts: beryllium gold-plated copper; Insulation: glass filled nylon.

Colors: One black and one red. See chart on page 7 for additional wire and cable specifications.



13



#### **BNC Male with Molded Strain Relief to** Minigrabber® Test Clips



| Model#    | Length      |
|-----------|-------------|
| 5187-C-24 | 24in (0.6m) |
| 5187-C-36 | 36in (0.9m) |
| 5187-C-48 | 48in (1.2m) |
| 5187-C-60 | 60in (1.5m) |
| 5187-K-24 | 24in (0.6m) |
| 5187-K-36 | 36in (0.9m) |
| 5187-K-48 | 48in (1.2m) |
| 5187-K-60 | 60in (1.5m) |
|           |             |

Rating: Maximum voltage for hands free use: 300 Vrms\*

BNC: Body: tarnish resistant nickel-plated brass; Center Contact: gold-plated brass; Dielectric: PTFE.

Strain Relief: PVC molded directly to cable and connectors.

Minigrabber: Contacts: beryllium gold-plated copper; Insulation: glass filled nylon.

Colors: One black and one red. See chart on page 7 for additional wire and cable specifications.

#### **BNC Male with Molded** Strain Relief to Minigator® **Test Clips**



| Model#    | Length      |
|-----------|-------------|
| 4532-C-24 | 24in (0.6m) |
| 4532-C-36 | 36in (0.9m) |
| 4532-C-48 | 48in (1.2m) |
| 4532-C-60 | 60in (1.5m) |

Rating: Maximum voltage for hands free use: 45 Vrms\*.

Jaws Opening: to 0.18in (47.50mm) max.

BNC: Body: tarnish resistant nickel-plated brass; Center Contact: gold-plated brass; Dielectric: PTFE.

Strain Relief: PVC molded directly to cable and connectors.

Minigator: Body: steel-plated nickel Colors: Vinyl boots: one black and

one red.

Rating: +122°F (+50°C) max. See chart on page 7 for additional wire and cable specifications.

#### **BNC Male with Molded** Strain Relief to SMD **Grabber® Test Clips**



|   | Model#    | Length      |
|---|-----------|-------------|
|   | 5304-K-24 | 24in (0.6m) |
| Γ | 5304-K-36 | 36in (0.9m) |

Rating: Maximum voltage for hands free use: 150 Vrms\*

BNC: Body: tarnish resistant nickel-plated brass; Center Contact: gold-plated brass; Dielectric: PTFE.

Strain Relief: PVC molded directly to cable and connectors

Grabber: Contacts: gold-plated stainless steel; Insulation: glass filled nylon.

Colors: One black and one red. See chart on page 7 for additional wire and cable specifications.

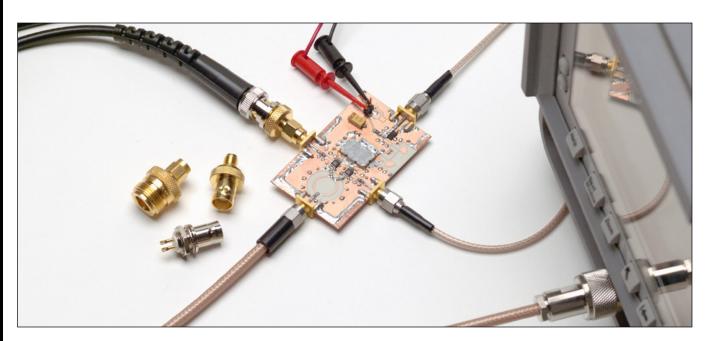
#### **Strain Relief Boot**

| Model# | Fits Cable Types | For Cable O.D.                    |
|--------|------------------|-----------------------------------|
| 5155-* | RG 58, 141       | 0.185in200<br>(4.70mm - 5.08mm)   |
| 5156-* | RG 59, 62, 210   | 0.237in247in<br>(6.02mm - 6.27mm) |
| 5157-* | RG 174, 187, 188 | 0.090in110in<br>(2.29mm - 2.79mm) |



Rating: +122°F (+50°C) max. Use with crimp type connectors.

Sold in packages of 10. \*Std. Colors: -0 Black, -2 Red





#### **IEC Insulated BNC Male to** Stackable/Retractable 4 mm plugs



| Model# | Length      |
|--------|-------------|
| 72908  | 10in (25cm) |

Impedance:  $50\Omega$ .

Rating: 33 Vrms/70 Vdc, 6A.

Color: Black.

#### **IEC Insulated BNC Female** to Stackable/Retractable 4 mm plugs



| Model# | Length      |
|--------|-------------|
| 72909  | 10in (25cm) |

Impedance:  $50\Omega$ . Rating: 33 Vrms/70 Vdc, 6A.

Color: Black.

### **Insulated BNC Male/4mm Shrouded Plugs**



| Model#     | Length       |
|------------|--------------|
| 72927-C-40 | 40in (100cm) |
| 72927-C-80 | 80in (200cm) |

Impedance:  $50\Omega$ . Rating: 500V CAT I, 150 V CAT II, 3A.

Color: Black.

#### BNC Male to ... the ends listed below



#### 1st End: Crimp BNC Male with Molded Strain Relief.

Body: tarnish resistant nickel-plated brass; Center Contact: gold-platedbrass; Impedance: 50Ω, Boot, PVC; Color: black.

Cable Type C: RG58C/U

Rating: Maximum voltage for hands free use: 500 Vrms\*.

BNC: Body: tarnish resistant nickel-plated brass; Center Contact: gold-plated brass

Strain Relief: PVC molded directly to cable and connectors.

#### Match to any end shown below

#### **BNC Male with Molded** Strain Relief to Multi-**Stacking Banana Plugs**



| Model#    | Length      |
|-----------|-------------|
| 5268-C-24 | 24in (0.6m) |
| 5268-C-36 | 36in (0.9m) |
| 5268-C-48 | 48in (1.2m) |
| 5268-C-60 | 60in (1.5m) |

#### 2nd End: Stacking Banana Plugs. Body: nickel-plated brass beryllium copper spring; Insulation: polyproylene; Colors: one black and one red.

See chart on page 7 for additional wire and cable specifications.

#### **BNC Male with Molded** Strain Relief to Multi-**Stacking Double Banana**



| Model#    | Length      |
|-----------|-------------|
| 4530-C-18 | 18in (0.5m) |
| 4530-C-24 | 24in (0.6m) |
| 4530-C-36 | 36in (0.9m) |
| 4530-C-48 | 48in (1.2m) |
| 4530-C-60 | 60in (1.5m) |

#### 2nd End: Double Banana Plugs.

Body: nickel-plated brass beryllium copper spring; Insulation: polyproylene. Color: black.

SSee chart on page 7 for additional wire and cable specifications.

#### **BNC Male with Molded** Strain Relief to **Retractable Sheath Banana Plugs**



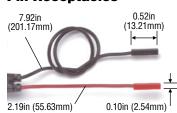
| Model#    | Length         |
|-----------|----------------|
| 5343-C-36 | 36in (0.9m)    |
| 5343-C-60 | 60in (1.5m)    |
| 3343-6-00 | 00111 (1.3111) |

Ideal for use with binding posts.

#### 2nd End: Sheathed Banana Plugs. Body: nickel-plated brass beryllium copper spring; Insulation: nylon.

See chart on page 7 for additional wire and cable specifications.

#### **BNC Male with Molded Strain Relief to Square** Pin Receptacles



| Model#    | Length      |
|-----------|-------------|
| 4945-K-18 | 18in (0.5m) |
| 4945-K-24 | 24in (0.6m) |
| 4945-K-36 | 36in (0.9m) |
| 4945-K-48 | 48in (1.2m) |
| 4945-K-60 | 60in (1.5m) |

#### 2nd End: 0.025in (0.6mm) Square Pin Receptacles

Center Contact, gold-plated brass; Insulation: ABS; Colors: one black and one red.

#### BNC Male or Female to ... the ends listed below

#### BNC Male (1st End):

Body: tarnish resistant nickel-plated brass; Center Contact: gold-plated brass; Insulation: polypropylene; Dielectric: PTFE.

Nominal impedance:  $50\Omega$ .

Colors: Black.

1 54in 1 39in (39.12mm) (34.80mm) 0.59in 0.59in (14.99mm) (14.99mm)

Overall length = BNC length + wire length + clip/plug length

Match to any end shown below

#### BNC Female (1st End):

Body: tarnish resistant nickel-plated brass; Center Contact: beryllium gold-plated copper; Insulation: polypropylene; Dielectric: PTFE.

Nominal impedance:  $50\Omega$ .

Colors: Black.

Male

Model#

|                | Male<br>Model# | Female<br>Model# | Wire Length  |
|----------------|----------------|------------------|--------------|
|                |                |                  |              |
| nigrabbar Tast | 3789           | 3788             | 5.5in (140mm |

#### ...Minigrabber® Test Clips (2nd End)



Minigrabber: Contacts: beryllium goldplated copper; Insulation: glass filled nylon.

Colors: One black and one red.

Rating: Maximum voltage for hands free use: 300 Vrms\*, +131°F (+55°C) max.

#### .Micrograbber® Test Clips (2nd End)



5189 5188 5.4in (137mm)

Micrograbber: Contacts: beryllium goldplated copper; Insulation: glass filled nylon.

Colors: One black and one red.

Rating: Maximum voltage for hands free use: 150 Vrms\*, +131°F (+55°C) max.

(2nd End)



2630 Alligator: Body: steel-plated nickel.

Female

Model#

Wire Length

5in (127mm)

5.9in (149mm)

5.5in (140mm)

5.9in (149mm)

5.4in (136mm)

5.6in (143mm)

Colors: Vinyl boots: one black and one red.

Rating: +122°F (+50°C) max.

Rating: Maximum voltage for hands free

use: 150 Vrms\*.

2886

3901

Jaw Opening: 0.30in (7.62mm).

### **Minigator Test Clips**

.. Alligator Test Clips

2 30in

(58.42mm)

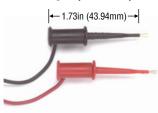


2631 Minigator: Body: steel-plated nickel.

Colors: Vinyl boots: one black and one red. Rating: Maximum voltage for hands free use: 45 Vrms\*, +122°F (+50°C) max.

Jaw Opening: 0.18in (47.50mm).

#### ... SMD Grabber® Test Clips (2nd End)



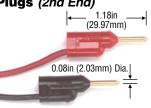
5305 Grabber: Contacts: gold-plated stainless steel; Insulation: glass filled nylon.

5.5in (140mm)

Colors: One black and one red.

Rating: Maximum voltage for hands free use: 150 Vrms\*, +131°F (+55°C) max.

#### **Stacking Pin Tip** Plugs (2nd End)



3221 Pin Tip Plug: Body: gold-plated brass; Insulation: polypropylene.

Colors: One black and one red.

Rating: Maximum voltage for hands free use: 500 Vrms\*, +131°F (+55°C) max.

### **Multi-Stacking**



3957 3073 5.4in (137mm)

Banana Plug: Body: brass, Spring: beryllium copper; gold-plated. Insulation: polypropylene.

Colors: One black and one red.

Rating: Maximum voltage for hands free use: 500 Vrms\*, +131°F (+55°C) max.

#### 20 AWG Leads (2nd End)



4969 Rating: Maximum voltage for hands free use: 500 Vrms\*, +131°F (+55°C) max.

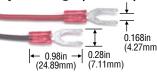
2nd End: None.

4970

### Banana Plug (2nd End)



#### Female only ... to #8 Spade Lugs (2nd End)





#### 5051 Spade Lug: Body: Copper, tin-plated; Insulation: vinvl.

Colors: One black and one red.

Rating: Maximum voltage for hands free use: 500 Vrms\*, +131°F (+55°C) max.

#### ... Stacking Miniature Banana Plugs (2nd End)



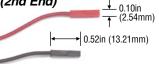
#### 3966 5.5in (140mm)

Banana Plug: Body: brass, Spring: beryllium copper; gold-plated. Insulation: polypropylene.

Colors: One black and one red.

Rating: Maximum voltage for hands free use: 500 Vrms\*, +131°F (+55°C) max.

#### Female only ... to .025 Square Pin Receptacles Square Pin: Gold-plated phosphor bronze, (2nd End)



### 5069

ABS insulation.

Colors: One black and one red.

Rating: Maximum voltage for hands free use: 500 Vrms\*, +131°F (+55°C) max.



Pomona has everything from a single reliable RF adapter to versatile kits packaged in lightweight, foam padded cases containing all the connections and terminations you might need. Small MCX, MMCX, SMA and SMB connectors enable attachment in today's tight spacings. Pomona connecting with quality.

#### **Universal Adapter Kit**



#### Model# 5698

Kit contains two each: BNC (m), BNC (f), TNC (m), TNC (f), SMA (m), SMA (f), N (m), N (f), four intermediate couplers, one double Banana Plug, one double Banana Jack, and case.



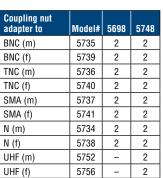
#### **Maxi Universal Adapter Kit**



#### Model# 5748

Kit contains two each: BNC (m), BNC (f), TNC (m), TNC (f), SMA (m), SMA (f), N (m), N (f), UHF (m), UHF (F), Mini UHF (m), Mini UHF (f), F (m), F (f), RCA (m), RCA (f), six intermediate couplers, one double Banana Plug, one double Banana Jack, one sampler, and case.

#### **Adapter Kit Accessories**



Individual adapters for the Universal Adapter Kits are also available.

| Coupling nut adapter to | Model# | 5698 | 5748 |
|-------------------------|--------|------|------|
| Mini UHF (m)            | 5753   | -    | 2    |
| Mini UHF (f)            | 5757   | -    | 2    |
| RCA (m)                 | 5754   | -    | 2    |
| RCA (f)                 | 5758   | -    | 2    |
| F (m)                   | 5759   | -    | 2    |
| F (f)                   | 5755   | -    | 2    |
| Coupler                 | 5742   | 4    | 6    |
| Dbl Banana Plug         | 5743   | 1    | 1    |
| Dbl Banana Post         | 5744   | 1    | 1    |
| Sampler                 | 5760   | -    | 1    |

#### **Multi-RF Direct Adapter Kit**



#### Model# 72934

A comprehensive kit including the most frequently used  $50\Omega$  RF adapters in a rugged pistol-grip case. Allows for direct adaptation without intermediate couplers. All parts are precision machined brass, not diecast, with tarnish resistant nickel plating. Male center pin contacts are gold plated brass. Female center contacts are gold plated heat treated beryllium copper. Insulation material is high density PTFE.

| KIL GU | mams.              |      |                                 |
|--------|--------------------|------|---------------------------------|
| 3535   | BNC (m)/Type N (f) | 4295 | SMA (f)/TNC (f)                 |
| 3288   | BNC (f)/Type N (m) | 4296 | SMA (m)/Type N (m)              |
| 3844   | TNC (m)/BNC (f)    | 3283 | BNC (f-f)                       |
| 4288   | SMA(m)/BNC(M)      | 3533 | BNC (m-m)                       |
| 4290   | SMA (m)/BNC (f)    | 3285 | BNC (f-m-f) TEE                 |
| 4289   | SMA (f)/BNC (m)    | 3284 | BNC (f-f-f) TEE                 |
| 4291   | SMA (f)/BNC (F)    | 4940 | TNC (f-f) Adapter               |
| 4298   | SMA (m)/Type N (f) | 3841 | TYPE N (f-f)                    |
| 4297   | SMA (f)/Type N (M) | 3842 | TYPE N (m-m)                    |
| 4299   | SMA (f)/Type N (f) | 4282 | SMA (m-f) Rt Angle              |
| 4292   | SMA (m)/TNC (m)    | 4283 | SMA (m-m)                       |
| 4294   | SMA (m)/TNC (f)    | 4284 | SMA (f-f)                       |
| 4293   | SMA (f)/TNC (m)    | 4286 | SMA Termination, $50\Omega$ (m) |
|        |                    |      |                                 |

#### **SMA Adapter Kit**



#### Model# 72931

A consolidated kit including the most frequently used SMA adapters in a rugged pistol-grip case. Allows for direct adaptation without intermediate couplers. All parts are precision machined brass, not diecast, with tarnish resistant nickel plating. Male center pin contacts are gold plated brass. Female center contacts are gold plated heat treated beryllium copper. Insulation material is high density PTFE.

| Kit co | ntains:                            |      |                          |
|--------|------------------------------------|------|--------------------------|
| 4282   | Right Angle SMA Female to SMA Male | 4292 | SMA Male to TNC Male     |
| 4283   | Inline SMA Male to SMA Male        | 4293 | SMA Female to TNC Male   |
| 4284   | Inline SMA Female to SMA Female    | 4294 | SMA Male to TNC Female   |
| 4286   | SMA Male Terminator Plug           | 4295 | SMA Female to TNC Female |
| 4288   | SMA Male to BNC Male               | 4296 | SMA Male to N Male       |
| 4289   | SMA Female to BNC Male             | 4297 | SMA Female to N Male     |
| 4290   | SMA Male to BNC Female             | 4298 | SMA Male to N Female     |
| 4291   | SMA Female to BNC Female           | 4299 | SMA Female to N Female   |

Ratings: The components in this section have a hands free rating for use in controlled voltage environments. However, for CE compliance these products are not intended for hand held use at voltages above 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum.

#### N Adapter Kit



#### Model# 72932

A consolidated kit including the most frequently used Type N adapters in a rugged pistol-grip case. Allows for direct adaptation without intermediate couplers. All parts are precision machined brass, not die-cast, with tarnish resistant nickel plating. Male center pin contacts are gold plated brass. Female center contacts are gold plated heat treated beryllium copper. Insulation material is high density PTFE.

#### BNC to Banana Plug and Binding Post Adapter Kit



#### Model# 5510

An assortment of many of Pomona's most popular BNC

#### Kit contains one each:

BNC Female to Stacking Double Banana Plug BNC Male to Stacking Double Banana Plug BNC Male to Stackable Binding Posts BNC Female to Stackable Binding Posts BNC Female to Female

BNC Male to Male adapters.

#### Kit contains:

3288 N Male to  $50\Omega$  BNC Female 3535 N Female to  $50\Omega$  BNC Male

3841 Inline N Female to N Female

3842 Inline N Male to N Male 3843 Right Angle N Female to N Male

4286 N Male to SMA Male

4297 N Male to SMA Female

4298 N Female to SMA Male

4299 N Female to SMA Female

5089 T Style N Female to N Female to N Female 4240-50  $50\Omega$  N Terminator Plug

4240-75 75 $\Omega$  N Terminator Plug

#### 7/16 DIN Adapter Kit



#### Model# 6254

This kit will enable the field service technician to connect equipment that has 7/16 DIN connectors to other equipment that has Type N connectors. These connectors are not compatible, but both are commonly found on the same types of telephone equipment and test equipment.

The key feature of the 7/16 DIN connector is the extremely high resistance to inter-modulation interference. These connectors are used in cellular phone and PCS systems to reduce interference in crowded cell sites and also in radio, television and repeater sites.

An assortment of the most useful adapters for conversion between 7/16 DIN and Type N.

#### Kit contains one each:

6256 7/16 DIN Male to Type N Male Adapter
6257 7/16 DIN Male to Type N Female Adapter
6259 7/16 DIN Female to Type N Male Adapter
6260 7/16 DIN Female to Type N Female Adapter
7/16 DIN Male to 7/16 DIN Female Right Angle Adapter
7/16 DIN Female to 7/16 DIN Female Splice
All parts are protected by a custom zippered case with die cut
foam padding.



### **BNC Within Series Adapter Kit**



#### Model# 5511

An assortment of Pomona's popular BNC within series adapters.

#### Kit contains one each:

BNC Female to Female 3283 BNC T (Female/Female) 3284 BNC T (Female/Male/Female) 3285 BNC Male to Male 3533 BNC Right Angle Male to Female 3534 BNC T (Male /Female/Female) 4896

### BNC 50 $\Omega$ Attenuator Kit



#### Model# 5513

Kit contains five Model 4108 BNC  $50\Omega$  attenuators, one each of 3dB, 6dB, 10dB, 14dB and 20dB.

(Same as Model 4108).

#### **Universal Adapter Cable**



| Model#  | Length      |
|---------|-------------|
| 5749-24 | 24in (0.6m) |
| 5749-36 | 36in (0.9m) |
| 5749-48 | 48in (1.2m) |
| 5749-60 | 60in (1.5m) |
| 5749-72 | 72in (1.8m) |

Make cable assemblies with any of the adapters in the universal adapter kits.

 $50\Omega\,$  RG 58C/U, 195" O.D.



#### **BNC Female to Double Stacking Banana Plug**



#### Model# 1269

Rating: Maximum voltage for hands free use: 500 Vrms\*, +122°F (+50°C) max.

Material: Banana Plug Jack: brass; Spring: heat treated beryllium copper; Finish: nickel plating.

#### 4mm Safety Banana Jack to 2mm Banana Plug Adapter



| Model#   | Color              |
|----------|--------------------|
| 72914-02 | Set, Black and Red |
| 72914-0  | 10 pack, Black     |
| 72914-2  | 10 pack, Red       |

Accepts 4mm safety-sheathed banana plugs.

Rating: 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum, 36A.

#### **BNC Male to Double Stacking Banana Plug**



#### Model# 1270

Rating: Maximum voltage for hands free use: 500 Vrms\*, +122°F (+50°C) max.

Material: Banana Plug Jack: brass; Spring: heat treated beryllium copper; Finish: nickel plating.

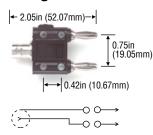
#### **BNC Female to Stackable Binding Posts**



#### Model# 1452

Rating: Maximum voltage for hands free use: 500 Vrms\*, +122°F (+50°C) max.

#### **BNC Female to Double Banana Plug**



#### Model# 1468

4 solder turrets provide access between BNC and isolated banana plugs.

Rating: Maximum voltage for hands free use: 500 Vrms\*, +131°F (+55°C) max.

BNC: isolated from Banana Plugs.

Material: Banana Plug Jack: brass; Spring: heat treated beryllium copper; Finish: nickel plating.

#### **BNC Male to Stackable Isolated Binding Posts** with 4 Terminals



#### Model# 1469

4 solder turrets for component attachments.

Use to make your own attenuator, balun, or filter.

Rating: Maximum voltage for hands free use: 500 Vrms\*, +131°F (+55°C) max.

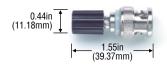
#### **Insulated BNC Male to Dual 4 mm Banana Jacks**



| Model# | Туре  |
|--------|-------|
| 72937  | Jacks |

Rating: 500V CAT I, 150V CAT II.

#### **BNC Male with Binding Post**



#### Model# 3430-\*

Rating: Maximum voltage for hands free use: 500 Vrms\*, +239°F (+115°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Insulated BNC Female** to Dual 4 mm Banana



| Model# | Туре  |
|--------|-------|
| 72938  | Jacks |

#### **BNC Female to Single Banana Plug**



#### Model# 1894

Rating: Hands free testing in controlled voltage environment: 500 Vrms\*, +122°F (+50°C) max.

# **Jacks**

**BNC Male to Stackable** 

**Binding Posts** 



#### Rating: 500V CAT I, 150V CAT II.

### Model# 1296

Rating: Maximum voltage for hands free use: 500 Vrms\*, +122°F (+50°C) max.



## **Double Banana Plug**

**BNC Female to Miniature** 



#### Model# 3269

Allows a BNC male to be used with equipment having 0.50in (12.70mm) spaced miniature banana jacks.

Rating: Maximum voltage for hands free use: 500 Vrms\*. +122°F (+50°C) max.

#### **BNC Male to Miniature Stackable Binding Posts**

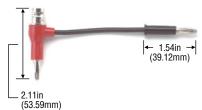


#### Model# 3296

Binding posts also accept miniature double banana plugs.

Rating: Maximum voltage for hands free use: 500 Vrms\*, +122°F (+50°C) max.

#### **BNC Female to Single Banana Plug with Ground** Lead



#### Model# 4684

Use with equipment having banana plugs or binding posts with nonstandard spacing.

18 AWG Ground wire, 2.5in (63.50mm) long.

Rating: Maximum voltage for hands free use: 500 Vrms\*, +131°F (+55°C) max.

#### **BNC Feed-Thru Termination**



| ,                  |             |
|--------------------|-------------|
| j                  | 100         |
| ; > <del>;</del> → | <del></del> |
| `~-'               | `'          |
|                    | !           |

| Model#   | Ω   |
|----------|-----|
| 4119-50  | 50  |
| 4119-75  | 75  |
| 4119-600 | 600 |

Rating: 2W Carbon film resistor.

Accuracy: 2%.

Frequency Range: DC to 500 MHz,

+216°F (+102°C) max.

#### **BNC Male/Female with DC-Blocking Series Capacitor**



#### Model# 5297

Use for sensitive RF measurements.

Rating: Maximum voltage for hands free use: 500 Vrms\*, +216°F (+102°C) max.

Capacitor: 1000 pF, 600 Vdc.

#### **BNC 50** $\Omega$ Attenuator



| Model#    | dB   |
|-----------|------|
| 4108-3dB  | 3dB  |
| 4108-6dB  | 6dB  |
| 4108-10dB | 10dB |
| 4108-14dB | 14dB |
| 4108-20dB | 20dB |

Rating: 2W Avg. @ 77°F

(25°C) max.

 $50\Omega$  impedance. Metal film resistor attenuator.

#### Type N Male Terminator Plugs



| Model#  | Ω  |
|---------|----|
| 4240-50 | 50 |

Rating: Frequency Range DC to 500 MHz, Power: 1W @ 158°F (70°C) max.

Accuracy: 1%.

#### **BNC In-Series Resistor Attenuator**



| Model#  | Ω  |
|---------|----|
| 4391-25 | 25 |
| 4391-50 | 50 |
| 4391-75 | 75 |

Rating: Frequency Range DC to 500 MHz, +216°F (+102°C) max.

Add series resistance to coaxial

1%, 2W, non-inductive film resistor.

#### **BNC Male Terminator Plugs**

1.44in

(36.83mm)

| Model#  | Ω  |
|---------|----|
| 3840-50 | 50 |
| 3840-75 | 75 |

Rating: Frequency range dc to 500MHz, power .5W @ 158°F (70°C) max.

Accuracy: 1%.

#### **BNC Shorting Cap or Dust**



| Model# | Туре         |
|--------|--------------|
| 5085   | Shorting cap |
| 3839   | Dust cap     |

Shorting cap provides protection and supplies a short across an input.

Dust cap protects sensitive instrument inputs and is non-shorting.

Tarnish resistant plating.

3in (76.20mm) long chain.



#### **BNC Straight RF Plugs**





1.11in (28.19mm)

Fig. 2: Crimp Style





Fig. 3: Crimp Style\*

Rating: Maximum voltage for hands free use: 500 Vrms.

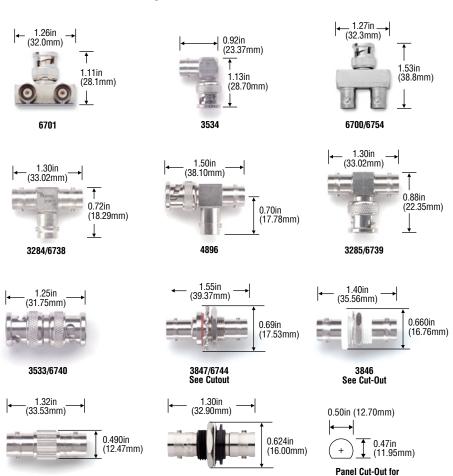
BNC: Body: tarnish resistant nickel-plated brass; Center Contact: male: gold-plated brass; female: gold-plated beryllium copper; Dielectric: PTFE.

\*Performance: 4 GHz with VSWR of 1.3 maximum from 0 to 4GHz.

\*\*see data sheet on website

| Model#                           | Туре       | Fig. | Cable Group RG_/U BNC   |
|----------------------------------|------------|------|---|
| $50\Omega$ Impedance Compression |            |      |   |
| 4488                             | BNC (m)    | 1    | 142, 142A, 142B, 223, 58, 58A, 58C, 5B, 5BA, 5BC, 8C, 141, 141A |
| 5307                             | BNC (m)    | 1    | 174, 174A, 179B, 187, 187A, 188, 188A, 316                      |
| 50 $\Omega$ Imped                | ance Crimp |      |   |
| 5285                             | BNC (m)    | 2    | RG58, 58A, 58C, 141, 141A                                       |
| 7035*                            | BNC (m)    | 2    | RG55A, 142, 142A, 223, 400                                      |
| 7040*                            | BNC (m)    | 2    | RG179. 179B, 187, 187A, 174, 188, 188A, 316                     |
| 73042**                          | BNC (m)    | 3    | 174, 188, 316   |
| 73043**                          | BNC (m)    | 2    | 8, 9, 11, 213, 214  |
| 73061                            | BNC (m)    | 3    | 58, 141   |
| <b>75</b> $\Omega$ Impedance     |            |      |   |
| 5286                             | BNC (m)    | 2    | 59, 59A, 59B, 62, 62A, 62B, 62C, 210                            |
| 6752A                            | BNC (m)    | 2    | 59A, 59B, 62, 210, Belden 8241, 8263                            |

#### **BNC** within Series Adapters



6705

| Model# Type      |             | Special Features        |
|------------------|-------------|-------------------------|
| <b>50</b> Ω Impo | edance      |                         |
| 3283             | BNC (f/f)   | -                       |
| 3533             | BNC (m/m)   | ı                       |
| 3285             | BNC (f/m/f) | -                       |
| 3284             | BNC (f/f/f) | ı                       |
| 4896             | BNC (m/f/f) | -                       |
| 3534             | BNC (f/m)   | Right Angle             |
| 3847             | BNC (f/f)   | Hermetically Sealed (b) |
| 3846             | BNC (f/f)   | Isolated Ground (a)     |
| 6700             | BNC (f/m/f) | In-line                 |
| 6701             | BNC (f/m/f) | Right Angle             |
| 75Ω Impo         | edance      |                         |
| 6705             | BNC (f/f)   | Isolated Ground (a)     |
| 6737             | BNC (f/f)   | -                       |
| 6738 BNC (f/f/f  |             | -                       |
| 6739 BNC (f/m/f  |             | _                       |
| 6740             | BNC (m/m)   | _                       |
| 6744             | BNC (f/f)   | Hermetically Sealed (b) |
| 6754 BNC (f/m/f) |             | In-line                 |

Notes: (a) Mounting hardware is isolated from outer conductor of BNC, (b) Leakage rate less than 10-7 cc/sec of tracer gas at one atmosphere.

Rating: Maximum voltage for hands free use: 500 Vrms\*, -85°F to +329°F (-65°C to +165°C).

BNC: Shell: tarnish resistant nickel-plated brass; Center Contact: male: gold-plated brass; female: gold-plated beryllium copper; Dielectric: PTFE.

Bandwidth: to 4 GHz.

3846/3847/6744

3283/6737



#### **BNC Panel Receptacles**



2447/2447A Dimensions for 6735 (not shown) 1.13in (28.6mm)

1 15in (29.25mm)



2451/2451A **Dimensions for 6736** (not shown) 1.06in (26.9mm)



**Cut-Out** for 2447/2447A/6735



(see table for spacing)

| Model# Type                  |         | Spacing  |
|------------------------------|---------|--|
| 50Ω Impe                     | dance   |  |
| 2447                         | BNC (m) | 0.531in (13.46mm) hole                         |
| 2451                         | BNC (f) | spacing center to center                       |
| 2447A BNC (m)                |         | 0.50in (12.70mm) hole                          |
| 2451A                        | BNC (f) | spacing center to center                       |
| <b>75</b> $\Omega$ Impedance |         |  |
| 6735                         | BNC (m) | 0.50in (12.70mm) hole spacing center to center |
| <b>6736</b> BNC (f)          |         | 0.50in (12.70mm) hole spacing center to center |

BNC: Shell: tarnish resistant nickel-plated brass; Center Contact: male: gold-plated brass; female: gold-plated beryllium copper; Dielectric: PTFE .

Type

Vertical BNC

R/A BNC

Dual R/A BNC

BNC (f)

BNC (f)

BNC (f)

Model#

4578 4788

6717

Material

Brass

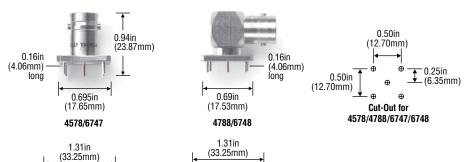
White Valox

White Valox

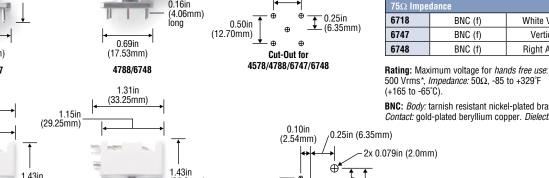
Vertical

Right Angle

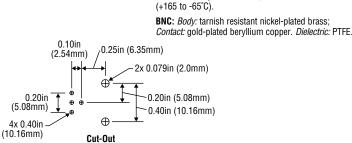
#### **BNC Female PCB Mount**



6718



(36.2mm)

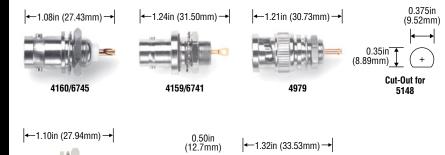


for 6717/6718

#### **BNC Bulkhead Receptacles**

6717

(36.2mm)



| Model#                       | Туре    | Special Features                      | Max. Panel<br>Thickness |  |
|------------------------------|---------|---------------------------------------|-------------------------|--|
| <b>50</b> Ω Imp              | edance  |                                       |                         |  |
| 3778                         | BNC (f) | Isolated Ground,<br>Teflon Insulation | 0.18in (4.57mm)         |  |
| 5148                         | BNC (f) | Isolated Ground,<br>Valox Insulation  | 0.175in (4.45mm)        |  |
| 4159                         | BNC (f) | Hermetically Sealed*                  | 0.37in (9.40mm)         |  |
| 4160                         |         | -                                     | 0.10in (2.54mm)         |  |
| 4979                         | BNC (m) | -                                     | 0.19in (4.83mm)         |  |
| <b>75</b> $\Omega$ Impedance |         |                                       |                         |  |
| 6741                         | BNC (f) | Isolated Ground                       | _                       |  |
| 6745                         | BNC (f) | -                                     | _                       |  |
| *1                           |         |                                       |                         |  |

<sup>\*</sup> Leakage rate less than 10<sup>-7</sup> cc/sec of tracer gas at one atmosphere.

BNC: Body. tarnish resistant nickel-plated brass; Center Contact: male: gold-plated brass; female: gold-plated beryllium copper (except as noted); Dielectric: PTFE.

Mounting hardware is isolated from outer conductor of BNC.

3778/6741

0.47in (11.95mm)

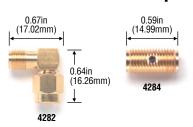
**Cut-Out for** 

3778/6741

5148



#### **SMA** within Series Adapters



| Model# Type |                                |
|-------------|--------------------------------|
| 4282        | SMA (f) to (m),<br>Right Angle |
| 4284        | SMA (f) to (f)                 |

**SMA:** *Shell:* gold-plated brass; *Center Contacts:* gold-plated brass; *Dielectric:* PTFE.

Frequency Range: 4283, 4284: 12.4GHz; 4282: 12GHz.

#### Type N Male Connector



#### Model# 4787

**Fit Cable Types:** RG58 and 142, 223, 141, 400.

**N:** Body: bronze-plated white brass; Center Contact: male: gold-plated brass; female: gold-plated beryllium copper; Dielectric: PTFE.

Impedance:  $50\Omega$  .

Rating: Maximum voltage for hands free use:

#### 1,000 Vrms\*.

#### **SMA Male Terminator Plug**



#### Model# 4286

 $\begin{array}{ll} \textbf{Rating:} \ \ \text{Maximum voltage for} \\ \textit{hands free use.} \ \ \text{335 Vrms*.} \\ \textbf{Impedance:} \ \ \text{50}\Omega \ \ \text{1/2 W., 1\%.} \\ \end{array}$ 

**VSWR:** 1.25 max. to 18GHz, 1/2 W,  $85^{\circ}$ F to  $+329^{\circ}$ F ( $65^{\circ}$ C to  $+165^{\circ}$ C).

Resistor Terminator.

Gold-plated stainless steel with Teflon insulation.

#### Type N to UHF



 Model#
 Type

 73047
 N (f)/UHF (m)

**N/UHF:** Body: nickel-plated brass; Center Contact: gold-plated phosphor bronze; Insulators: PTFF

**Rating:** Maximum voltage for *hands free use*: 750 V.

#### SMA Plug, 50 $\Omega$ Termination



#### 72975

**Bandwidth:** 0-12.4 GHz on flexible

Rating: For CE compliance and personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 500 Vpeak: RG58, 141, 143; 375 Vpeak: RG174, 188, 316. Do not use on circuits where transient stresses can exceed the rated voltage.

Body: machined brass, gold-plated finish; Center Contacts: plug: gold-plated brass; jack: gold-plated beryllium copper.

#### Type N to TNC



 Model#
 Type

 73046
 N (f)/TNC (m)

**N/TNC:** Body: nickel-plated brass; Center Contact: gold-plated phosphor bronze; Insulators: PTFE.

Impedance:  $50\Omega$ 

**Rating:** Maximum voltage for *hands free use*: 1500 V.

#### SMA Female to Female Bulkhead Receptacle



**SMA:** Shell: gold plated brass; Center Contacts: gold plated brass; Dielectric: PTFE.

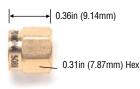
#### F Adapter



| Model# | Туре                     |
|--------|--------------------------|
| 6802   | F (F/F) Bulkhead adapter |

**Material:** These 75  $\Omega$  connectors are designed for fast installation with no crimping. Connectors are precision machined brass with nickel plating and gold plated center contacts.

#### **SMA Shorting Cap**



#### Model# 5088

Model# 4285

Screw onto SMA female. Protects sensitive instrument inputs or provides a necessary reference short.

**SMA**: *Shell*: gold plated; *Center Contacts*: gold-plated steel.

#### F within Series Adapters



| Model# | Туре                     |
|--------|--------------------------|
| 6712   | F (m/f) Right angle      |
| 6713   | F (m/f) In line, Push-on |

Material: Machined, nickel-plated brass.



#### Type N Adapters 1.44in (36.58mm)











| Model# Type                       |           |
|-----------------------------------|-----------|
| 3841                              | N (f/f)   |
| 3842                              | N (m/m)   |
| 3843 N (f/m)                      |           |
| <b>5089</b> N (f/f/f)             |           |
| 73044*                            | N (m/f/m) |
| 73045* N (f/f) Pressurized Bulkhe |           |

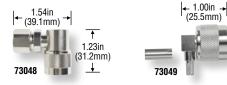
N: Body: nickel plated or bronze-plated white brass; Center Contact: male: gold-plated brass, female: beryllium copper or phosphor bronze, gold-plated; Dielectric: PTFE.

Impedance:  $50\Omega$ .

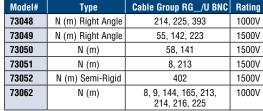
Rating: Maximum voltage for hands free use. 1,000 Vrms\*.

\*see data sheet on website for ratings

#### Type N Male 50 $\Omega$ Connectors



3843



N: Body: nickel-plated brass; Center Contact:

gold-plated brass; Dielectric: PTFE.

Impedance:  $50\Omega$ .





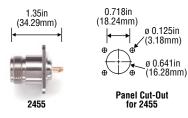




1.08in

(27.5mm)

#### Type N Panel Mount Receptacle







Panel Cut-Out for 4956

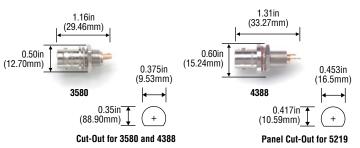
| Model# | Туре  |
|--------|-------|
| 2455   | N (f) |
| 4956   | N (f) |

N: Body: bronze-plated white brass; Center Contact: female: gold-plated beryllium copper; Dielectric: PTFE.

Impedance:  $50\Omega$ .

Rating: Maximum voltage for hands free use: 1.000 Vrms\*.

#### **Triaxial Female Bulkhead Receptacles**





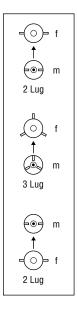
|     | 3   |
|-----|-----|
| ) . | 4   |
| →   | 5   |
| _   | 0   |
| -   | *H  |
|     | 10  |
|     | Tri |

Model# Max. Panel Thickness Lugs 3580 2 lug (f) 0.25in (6.35mm) 1388\* 2 lug (f) 0.25in (6.35mm) 219 3 lug (f) 0.14in (3.56mm)

lermetically sealed leakage less than -7 cc/sec tracer gas at one atmosphere.

Triaxial: Body/Fittings: tarnish resistant nickel-plated brass; Center Contact: female: gold-plated beryllium copper; Outer Contact: gold-plated beryllium copper; Dielectric: PTFE.





### Triaxial Cable Plugs and Jacks



| Model# | Lugs      | Max. Panel<br>Thickness | Fits Cable Types                               |
|--------|-----------|-------------------------|--|
| 3600   | 2 Lug (m) | ı                       | Belden twinaxial 9272<br>0.242in (6.15mm) 0.D. |
| 4661   | 2 Lug (f) | 0.14in (3.56mm)         | Microdot 293-3930<br>0.175in (4.45mm) O.D.     |
| 5056   | 2 Lug (m) | -                       | Belden triaxial 9222                           |
| 5218   | 3 Lug (m) | _                       | 0.242in (6.15mm) O.D.                          |

Triaxial: Body/Fittings: tarnish resistant nickel-plated brass; Center Contact: male: gold-plated brass; female: gold-plated beryllium copper; Outer Contact: gold-plated beryllium copper; Dielectric: PTFE.

#### **Triaxial Adapters**



| Model# | Lugs      | Max. Panel Thickness |
|--------|-----------|----------------------|
| 5178   | 2 Lug (f) | 0.25in (6.35mm)      |
| 5290   | 2 Lug (f) | _                    |

Triaxial: Body/Fittings: tarnish resistant nickel-plated brass; Center Contact: female: gold-plated beryllium copper; Outer Contact: gold-plated beryllium copper; Dielectric: PTFE.

#### **RF MCX Connectors**

Bandwidth: 3-6 GHz, depending upon connector. (see data sheet on website.)

Working Voltage: For CE compliance and personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 170 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage.

Materials: Body: brass, gold-plated finish; Center Contacts: plug: gold-plated brass; jack: gold-plated beryllium copper.

Above specifications apply to models 73004, 73014, 73015 and 73012 below

#### **RF MMCX Connectors**

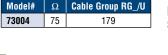
Bandwidth: 3-6 GHz, depending upon connector (see data sheet on website).

Working Voltage: For CE compliance and personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 170 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage.

Materials: Body: brass, gold-plated finish; Center Contacts: plug: gold-plated brass; jack: gold-plated beryllium copper.

Above specifications apply to models 73037, 73028 and 73039 below

| CX Plug, Straight Chilip | 73004 | 75 | 179 |
|--------------------------|-------|----|-----|
| 0.70in (17.8mm)          |       |    | •   |
|                          |       |    |     |
|                          |       |    |     |





#### Cable Group RG\_/U Model# Ω MCX Plug, Straight 73014 50 402 Semi-Rigid Crimp 0.46in (11.8mm)

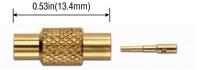


| MCX Jack,       | Model# | Ω  |
|-----------------|--------|----|
|                 | 73012  | 75 |
| 0.76in (19.3mm) |        |    |
| <b>├</b>        |        |    |



#### **MMC** Semi

| X 50 $\Omega$ Jack, Straight | Model# | Cable Group RG_/U |
|------------------------------|--------|-------------------|
| i-Rigid Crimp                | 73037  | 405               |
| <b>-</b>                     |        |                   |



73028

MMCX 50 $\Omega$ Jack, Right-**Angle PCB** Receptacle



#### **RF SMA Connectors**

Bandwidth: 0-12.4 GHz on flexible cable (see data sheet on website).

Rating: For CE compliance and personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 500 Vpeak: RG58, 141, 143; 375 Vpeak: RG174, 188, 316. Do not use on circuits where transient stresses can exceed the rated voltage.

Materials: Body: machined brass, gold-plated finish; Center Contacts: plug: gold-plated brass; jack: gold-plated beryllium copper.

#### Above specifications apply to the models on this page



| Description    | Cable Group<br>RG_/U             |
|----------------|----------------------------------|
| Straight Crimp | 58                               |
| Straight Crimp | 142, 400                         |
| Straight Crimp | 174, 188, 316                    |
|                | Straight Crimp<br>Straight Crimp |

### SMA 50 $\Omega$ Within Series Adapters



| Model# | Description                     |
|--------|---------------------------------|
| 72964  | Plug (m/m)                      |
| 72966  | Jack (f/f)                      |
| 72967  | Jack, Reverse<br>Polarity (f/f) |
| 72973  | Jack (f) to Jack (f)            |
| 72974  | Jack to Reverse<br>SMA Plug     |





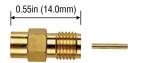
| Model# | Cable Group<br>RG_/U  |
|--------|-----------------------|
| 72959  | 141, 174, 188,<br>316 |
| 72960  | 142, 400              |

# 0.87in (22.2mm) → | **72966**



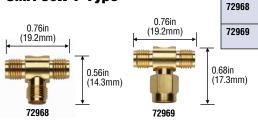


#### SMA 50 $\Omega$ Jack, Straight Crimp



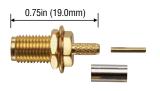
| Wodel# | RG_/U         |
|--------|---------------|
| 72953  | 142, 400      |
| 72954  | 174, 188, 316 |
|        |               |

#### SMA 50 $\Omega$ T Type



72963

#### SMA 50 $\Omega$ Jack, Bulkhead Crimp



| Model# | Cable Group<br>RG_/U  |
|--------|-----------------------|
| 72956  | 174, 178, 188,<br>316 |

### SMA 50 $\Omega$ Jack, Panel Receptacle



| Model# | Description |
|--------|-------------|
| 72961  | 2 Hole      |
| 72962  | 4 Hole      |

#### SMA 50Ω Jack, Straight PCB Receptacle



# SMA 50Ω Jack, Straight PCB Receptacle Edge Mount

Model#

Description

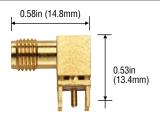
Jack (f)/ Jack (f)/Jack (f)

Jack (f)/Plug (m)/

72971



SMA 50 $\Omega$  Jack, Right-Angle PCB Receptacle





#### **RF SMA Connectors**

Bandwidth: 3-4 GHz, depending upon connector (see data sheet on website).

Rating: For CE compliance and personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 250 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage.

Materials: Body: machined brass, gold-plated finish; Center Contacts: plug: gold-plated brass; Jack: gold-plated beryllium copper.

#### Above specifications apply to the models on this page except 5375

### SMB Jack, Straight Crimp



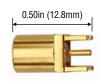
| Model# | Ω  | Cable Group<br>RG_/U |
|--------|----|----------------------|
| 72984  | 50 | 174, 188, 316        |

# SMB 50 $\Omega$ Plug, Panel Receptacle



72996

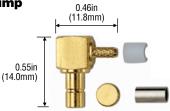
#### SMB 50Ω Plug, Straight PCB Receptacle



72995

72997

### SMB Jack, Right-Angle Crimp

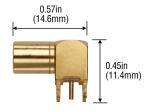


| Model# | Ω  | Cable Group<br>RG_/U |
|--------|----|----------------------|
| 72992  | 50 | 174, 188, 316        |

#### SMB 50Ω Jack, Straight PCB Receptacle



#### SMB 50Ω Plug, Right-Angle PCB Receptacle



#### **SMB Plug, Straight Crimp**



| Model# | Ω  | Cable Group<br>RG_/U |
|--------|----|----------------------|
| 72981  | 50 | 174, 188, 316        |

Cable Group

RG\_/U

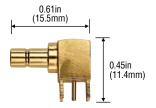
174, 188, 316

Model#

72988

50

# SMB 50Ω Jack, Right-Angle PCB Receptacle



#### SMB Plug, Right-Angle Crimp



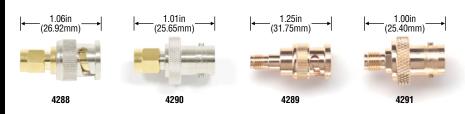
### SMB Plug, Bulkhead



| Model# | Ω  | Cable Group<br>RG_/U |
|--------|----|----------------------|
| 73000  | 50 | 174, 188, 316        |



#### **SMA to BNC**



| Model#   | Туре               |
|----------|--------------------|
| IVIOUGIT | турс               |
| 4288     | SMA (m) to BNC (m) |
| 4290     | SMA (m) to BNC (f) |
| 4289     | SMA (f) to BNC (m) |
| 4291     | SMA (f) to BNC (f) |

Rating: Maximum voltage for hands free use: 335 Vrms\*.

Impedance:  $50\Omega$ .

SMA: Shell: gold-plated brass; Center Contacts: male: gold-plated brass; female: gold-plated beryllium coper; Dielectric: PTFE.

#### **SMA to Type N**









Model# Type 4296 SMA (m) to type N (m) 4298 SMA (m) to type N (f) 4297 SMA (f) to type N (m) 4299 SMA (f) to type N (f)

Rating: Maximum voltage for hands free use: 335 Vrms\*.

Impedance:  $50\Omega$ .

Material: Shell: gold-plated brass; Center Contacts: gold-plated brass; Dielectric: PTFE.

#### **SMA to TNC**









| 4292 | SMA (m) to TNC (m) |
|------|--------------------|
| 4294 | SMA (m) to TNC (f) |
| 4293 | SMA (f) to TNC (m) |
| 4295 | SMA (f) to TNC (f) |
|      |                    |

Maximum voltage for hands free use: 335 Vrms\*.

Material: Shell: gold-plated brass; Center Contacts: gold-plated brass; Dielectric: PTFE.

#### **SMA to SMB**



| Model# | Туре               | Ω  |
|--------|--------------------|----|
| 72976  | SMA (m) to SMB (m) |    |
| 72977  | SMA (m) to SMB (f) | 50 |
| 72978  | SMA (f) to SMB (m) | 50 |
| 72979  | SMA (f) to SMB (f) |    |
| 72979  | SMA (f) to SMB (f) |    |

Bandwidth: 0-12.4 GHz on flexible cable.

Rating: For CE compliance and personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 500 Vpeak: RG58, 141, 143; 375 Vpeak: RG174, 188, 316. Do not use on circuits where transient stresses can exceed the rated voltage.

Materials: Body: machined brass, gold-plated finish; Center Contacts: plug: gold-plated brass; jack: gold-plated beryllium copper.

#### **BNC** to F









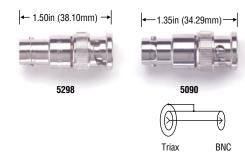
| Model# | Туре          |
|--------|---------------|
| 6779   | BNC (m)/F (f) |
| 6780   | BNC (f)/F (f) |
| 6781   | F (m)/BNC (f) |
| 6782   | BNC (m)/F (m) |
|        |               |

BNC: Shell: tarnish resistant nickel-plated brass; Center Contact: male: gold-plated brass; female: gold-plated beryllium copper (except as noted); Dielectric: PTFE.



#### **Triaxial to BNC**





Triaxial shell is shorted to outer shield

| Model# | Туре                               |  |
|--------|------------------------------------|--|
| 5299   | 3 Lug Triax (f)/BNC (m)<br>adapter |  |
| 5298   | 2 Lug Triax (f)/BNC (m)<br>adapter |  |
| 5090   | BNC (f)/2 Lug Triax (m)<br>adapter |  |
| 5300   | BNC (f)/3 Lug Triax (m)<br>adapter |  |

Triaxial: Body: tarnish resistant nickelplated brass; Center Contact: male: gold-plated brass; female: gold-plated beryllium copper; Outer Contact: goldplated beryllium copper; Dielectric: PTFE.

#### **BNC to TNC**



| Model# | Туре            |
|--------|-----------------|
| 3844   | BNC (f)/TNC (m) |

Rating: Maximum voltage for hands free use: 500 Vrms\*, -85°F to + 325°F (-65°C to +165°C) (except as noted).

Impedance:  $50\Omega$  (except as noted).

BNC: Shell: tarnish resistant nickel-plated brass; Center Contact: male: gold-plated brass; female: gold-plated beryllium copper (except as noted); Dielectric: PTFE.

#### **BNC Male to Phono Jack**

← 1.35in (34.29mm) →

5300

Traix

1.28in

(32.5mm)

**BNC** 

**BNC Female to Phono** 

(RCA) Male



#### Model# 5319

Rating: Hands free testing in controlled voltage environment: 500 Vrms\*, 216°F (+102°C) max.

BNC: Center Contact: gold-plated.

#### **UHF to BNC**



| 2 | n | o | 7 |  |
|---|---|---|---|--|
|   |   |   |   |  |



3286

| Model# Type |                     | Special Features                                    |  |
|-------------|---------------------|---|--|
| 3287        | BNC (m)/<br>UHF (f) | Phos. Bronze<br>Contact<br>Nonconstant<br>Impedance |  |
| 3286        | BNC (f)/UHF<br>(m)  | Nonconstant<br>Impedance                            |  |

Rating: Maximum voltage for hands free use: 335 Vrms\*, -85 to +325°F (-65 to +165°C) (except as noted).

Impedance:  $50\Omega$  (except as noted).

UHF: Shell: tarnish resistant nickel-plated brass; Center Contact: male: gold-plated brass; female: gold-plated beryllium copper (except as noted);

Dielectric: PTFE.



#### Model# 4054

Rating: Hands free testing in controlled voltage environment: 500 Vrms\*, +257°F (+125°C) max.

#### **BNC Female to 1/4in** (6.35mm) Phone Plug



#### Model# 1297

Rating: Hands free testing in controlled voltage environment: 500 Vrms\*, +257°F (+125°C) max. Convert 2 conductor audio jacks

to BNC.

#### Type N to BNC





3288

| Model# | Туре          | Special Features                 |
|--------|---------------|----------------------------------|
| 3535   | BNC (m)/N (f) |                                  |
| 3288   | BNC (f)/N (m) | Beryllium Copper<br>Male Contact |

Rating: Maximum voltage for hands free use: 500 Vrms max., -85 to +325°F (-65 to +165°C) (except as noted).

Impedance:  $50\Omega$  (except as noted).

N: Shell: tarnish resistant nickel-plated brass; Center Contact: male: gold-plated brass; female: gold-plated beryllium copper (except as noted); Dielectric: PTFE.

#### **BNC Female to Two** Conductor, 0.14in (3.5mm) Dia. Mini Phone Plug



#### Model# 3837

Rating: Hands free testing in controlled voltage environment: 500 Vrms\*, +257°F (+125°C) max. Convert 2 conductor audio jacks to BNC.



### **RF Between Series Adapters**

#### **TNC Connectors**



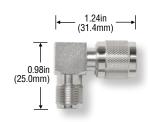
| Model# | Туре                   | Cable Group RG_/U BNC |
|--------|------------------------|-----------------------|
| 73054  | TNC (m)<br>Right Angle | 55, 142, 223, 400     |
| 73056  | TNC (m)                | 58, 141               |
| 73057  | TNC (m)                | 59, 62                |

N: Body: nickel-plated brass; Center Contact: gold-plated brass; Insulators: PTFE.

Impedance:  $50\Omega$ .

Rating: Maximum voltage for hands free use: 1500 V.

#### **TNC Adapter**



| Model# | Туре                  |  |
|--------|-----------------------|--|
| 73053  | TNC (f/m) Right Angle |  |

N/TNC: Body: nickel-plated brass; Center Contact: male: gold-plated brass, female: gold-plated phosphor bronze; Insulators: PTFE.

Impedance:  $50\Omega$ .

Rating: Maximum voltage for hands free *use*: 1500 V.

#### **Strain Relief Boot**



2.75in (69.85mm)

Model# **Fits Cable Types** For Cable O.D. 5155-\* 0.185in - .200 RG 58, 141 (4.70mm - 5.08mm) 5156-\* RG 59, 62, 210 0.237in - .247in (6.02mm - 6.27mm) RG 174, 187, 188 0.090in - .110in (2.29mm - 2.79mm)

> Rating: +122°F (+50°C) max. Use with crimp type connectors. Sold in packages of 10.

\*Std. Colors: -0 Black, -2 Red

#### **BNC Male with Strain Relief Boot**



Make your own cable with strain relief. 5076: Black boot with nut only.

For use with connectors using a 7/16-28 clamp nut. Simply replace supplied nut with the one on the boot.

Rating: Maximum voltage for hands free use: 500 Vrms\*, +122°F (+50°C) max.

| _ |        |                  |  |
|---|--------|------------------|--|
|   | Model# | Fits Cable Types | For Cable O.D.                         |
|   | 5066-* | RG 58, 141       | 0.185in - 0.200<br>(4.70mm - 5.08mm)   |
|   | 5068-* | RG 174, 187, 188 | 0.090in - 0.110in<br>(2.29mm - 2.79mm) |
|   | 5076-* | RG 58, 141       | 0.185in - 0.200in<br>(4.70mm - 5.08mm) |

\*Available in -0 black only

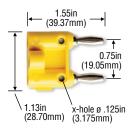


www.pomonaelectronics.com

Just need a reliable plug or jack? Making your own test set? Pomona Electronics' selection is designed to meet demanding electrical characteristics. Nickel-plated plugs feature brass bodies and one-piece heat-treated beryllium copper springs with nylon or ABS insulation. Choose Pomona for the reliable and dependable connections your work demands.



#### Double Banana Plug with Wire Guide, Stackable, Solderless



**Double Banana Plug** 

1.55in

(39.37mm)

0.75in

(19.05mm)

with Solder Turret

**Terminals** 

1.13in

(28.70mm)

| Model# | Plating                                    | Insulation               | *Std. Colors   |
|--------|--|--------------------------|--|
| MDP-*  | Nickel                                     | Polypropylene            | -0 Black, -1 Brown,<br>-2 Red, -3 Orange,<br>-4 Yellow, -5 Green,<br>-6 Blue, -7 Wist, |
| 4000 + | 0-1-1                                      | Delumenulone             | -8 Gray, -9 White<br>-0 Black, -2 Red  |
| 4892-* | Gold                                       | Polypropylene            | -U Black, -Z Reu   |
| 4898-* | Nickel                                     | Polyphenylene<br>Sulfide | -0 Black, -6 Blue  |
| 4914   | Set screws 8-32 x 0.210in (5.33mm), 100/pk |                          |  |

Set screws secure wire. Simplifies cable construction or component mounting. Accepts cables to 0.22in (5.59mm) dia. max., (18-22 AWG wire).

**Material:** Banana Plug/Jack: brass; Spring: heat treated beryllium copper; Finish: nickel plating.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +122°F (+50°C) (Model 4898, +302°F (+150°C) max.).

### Model# MDP-ST

Similar to MDP above except with bright tin plated solder turrets. Accepts cables to 0.215in (5.46mm) dia. max.

**Material:** Banana Plug/Jack: brass; Spring: heat treated beryllium copper; Finish: nickel plating; Insulation: polypropylene.

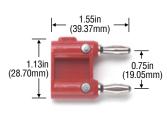
Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +131°F (+55°C) max.

Color: Black.

#### Model# 4914

Set screws 8-32 x 0.210in (5.33mm), 100/pk.

#### Double Banana Plug with Solder Turret Terminals



#### Model# 1330-ST-\*

Similar to Model 1330 above, but features bright tin plated solder turrets.

Material: Banana Plug/Jack: brass; Spring: heat treated beryllium copper; Finish: nickel plating; Insulation: polypropylene.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.

### Double Banana Plug with Shorting Bar



#### Model# MDP-S-\*

Banana plugs internally shorted with #18 AWG wire.

X-hole accepts standard banana plug.

**Material:** Banana Plug/Jack: brass; Spring: heat treated beryllium copper; Finish: nickel plating; Insulation: Polypropylene.

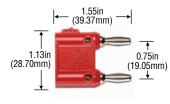
Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red, -9 White.

#### Model# 4914

Set screws 8-32 x 0.210in (5.33mm), 100/pk.

#### Double Banana Plug, Stackable, Solderless



#### Model# 1330-\*

Similar to MDP without cable loop.

Features recess for mounting small components with set screws.

Model 1330 has setscrews like MDP.

Material: Banana Plug/Jack: brass; Spring: heat treated beryllium copper; Finish: nickel plating; Insulation: Polypropylene.

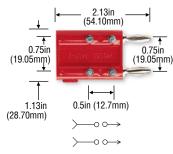
Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpl/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage.15A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### Model# 4914

Set screws 8-32 x 0.210in (5.33mm), 100/pk.

#### Isolated Double Banana Plug with Four Solder Terminals



#### Model# MDP-X

Use to make your own attenuator, balun or filter.

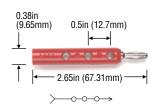
Jacks are isolated from plugs.

Material: Banana Plug/Jack: brass; Spring: heat treated beryllium copper; Finish: nickel plating; Insulation: Polypropylene; Solder turrets; bright tin plated.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +131°F (+55°C) max.

Color: Red.

#### **QUAD Stacking Plug**



#### Model# 3364-\*

Features one in-line stacking and three cross-stacking connections

All jacks are connected to plug

Material: Banana Plug/Jack: brass; Spring: heat treated beryllium copper; Finish: nickel plating; Insulation: ABS.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +122°F (+50°C) Max.

\*Std. Colors: -0 Black, -2 Red.

#### Triple Banana Plug, Stackable, Solderless



#### Model# 2970-\*

Use for balanced line 2 conductor shielded cable assemblies. Accepts cables to 0.250in (6.35mm) dia. max., Setscrews secure wires.

Material: Banana Plug/Jack: brass; Spring: heat treated beryllium copper; Finish: nickel plating; Insulation: Polypropylene.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage.15A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **4mm Safety Banana Jack to Banana** Plug Adapter



#### Model# 6728

Accepts safety-sheathed 4mm banana plug and adapts to standard banana plug.

Material: nickel plated brass.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. -10 to +55°C.

\*Std. Colors: -0 Black, -2 Red.

#### **Double Banana Plug Splice**



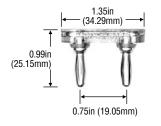
#### Model# 1823-\*

Provides rapid method for splicing cables.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +131°F (+55°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### Insulated Double Banana Model# 5145 **Plug Shorting Bar**



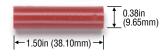
Shorting bar is completely insulated in clear ABS thermoplastic.

Fits standard 0.166in (4.22mm) dia. banana iack.

Material: Banana Plug Body: brass; Spring: beryllium copper; Finish: nickel plating.

Rating: 15A, +122°F (+50°C) max., resistance less than  $1.5 m\Omega$ 

#### Single Banana Plug Splice



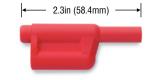
#### Model# 1829-\*

Provides rapid method for splicing single banana plug patch cords.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +55°C (+131°F) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Do-It-Yourself 4mm** Stackable Banana Plug, Solder



#### Model# 6721

Build your own safety stacking leads with do-it-yourself safety-sheathed 4mm stackable banana plugs.

Material: Contacts: nickel-plated brass, Insulation: lucel acetal polymer.

Rating: IEC61010 1000V Category III\*\*, 20A, 14 to 176°F (-10 to +95°C).

\*Std. Colors: -0 Black, -2 Red.

\*\* When plug is correctly assembled and terminated.

#### **Do-It-Yourself 4mm Right Angle Banana Plug**



◆ Back • Next ▶ ToC ▲

#### Model# 6729

Build your own safety leads with do-ityourself safety-sheathed 4mm right angle banana plug.

Material: Contacts: nickel-plated brass; Insulation: lucel acetal polymer.

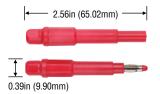
Rating: IEC61010 1000V Category III\*\*. 20A, 14 to 176°F (-10 to +55°C).

\*Std. Colors: -0 Black, -2 red.

\*\* When plug is correctly assembled and terminated.



#### Do-It-Yourself Retractable Sheath Banana Plug



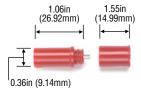
| Model#  | Color |
|---------|-------|
| 122505A | Black |
| 122506A | Red   |

Do-It-Yourself Retractable Sheath Banana Plugs provide fast simple assembly and reliable performance.

**Rating:** For CE CAT II 300V, CAT III 150V. Maximum voltage for *hands free use*:  $1000 \text{ Vrms}, 20\text{A}, \leq 2 \text{ m}\Omega$ .

Accepts 18-22 AWG wire.

#### Do-It-Yourself In-Line Sheathed Banana Plug/ Banana Jack



4933/4986 Plugs



4934 Jacks



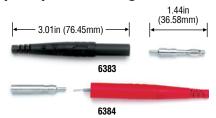
These plugs and jacks are designed to fit together and provide protection from accidental shorting.

**Material:** Banana Plug/Jack: brass; Spring: beryllium copper; Insulation: polypropylene.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1200V ac/dc. Do not use on circuits where transient stresses can exceed the rated voltage.15A, +176°F (+80°C) max.

\*Std. Colors: -0 Black, -2 Red.

### Do-It-Yourself In-Line Sheathed (4mm) Banana Plug and Jack



Safety-rated plugs and jacks for use with any wire from 22 to 18 AWG with flexible insulation. Attaches to wire by crimp or soldering.

Plugs fit most sheathed DMM jacks and DMM test leads to make up your own banana plug or jack test lead or jumper.

See mating panel jacks (6387 on page 36).

**Material:** Banana Plug/Jack: brass; Spring: heat treated beryllium copper; Insulation: Santoprene®.

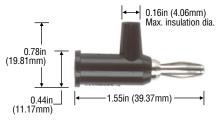
Rating: CAT II 300V, 15A, +275°F (+135°C) max.

\*Std. Colors: -0 Black, -2 Red, -02 Black and Red (2 per pkg).

\*Sold in pkgs of 10.

| Model#  | Туре |
|---------|------|
| 6383-*  | Dlug |
| 6383-02 | Plug |
| 6384-*  | Jack |
| 6384-02 |      |

#### Do-It-Yourself Solderless Stackup Banana Plug with Safety Shield



Internal set screw holds wire firmly.

Safety collar insulates exposed wire leads.

Accepts standard banana plug and fits 0.166in (4.22mm) dia. banana jack.

**Material:** Banana Plug/Jack: brass; Spring: heat treated beryllium copper.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage.15A, +122°F (+50°C) max. (Model 4899, +302°F (+150°C) max.).

Accepts 18-22 AWG wire.

| Model# | Plating | Insulation               | Std. Colors   |
|--------|---------|--------------------------|---|
| 1825-* | Nickel  | Polypropylene            | -0 Black, -1 Brown,<br>-2 Red, -3 Orange,<br>-4 Yellow,<br>-5 Green, -6 Blue,<br>-7 Violet,<br>-8 Gray, -9 White.<br>Sold in pkgs of 10 |
| 4897   | Gold    | Polypropylene            | -0 Black, -2 Red  |
| 4899   | Nickel  | Polyphenylene<br>Sulfide | -0 Black, -6 Blue<br>Sold in pkgs of 10   |
| 6545   | Nickel  | Polypropylene            | Pkg of 1 ea. of all<br>10 colors  |

#### **Do-It-Yourself Solderless Stackup Banana Plug**



4914 set screws  $8-32 \times 0.210 \text{ (5.33mm)}, 100/pk.$  Internal set screw holds wire firmly.

Accepts standard banana plug, fits standard 0.166in (4.22mm) dia. banana jack.

**Material:** Banana Plug/Jack: brass; Spring: heat treated beryllium copper.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage.15A, +122°F (+50°C) max. (Model 5230, +302°F (+150°C) max.).

Accepts 18-22 AWG wire.

| Model# | Plating | Insulation               | Std. Colors  |
|--------|---------|--------------------------|--|
| 1325-* | Nickel  | Polypropylene            | -0 Black, -1 Brown,<br>-2 Red, -3 Orange,<br>-4 Yellow, -5 Green,<br>-6 Blue, -7 Violet,<br>-8 Gray, -9 White. |
| 5406   | Gold    | Polypropylene            | -0 Black, -2 Red   |
| 5230   | Nickel  | Polyphenylene<br>Sulfide | -0 Black, -6 Blue  |
| 6546   | Nickel  | Polypropylene            | Pkg of 1 ea. of all<br>10 colors   |

<sup>\*</sup>Sold in pkgs of 10.



#### **Rivet Type Banana** Plug



| Model# | " <b>X</b> "        | Panel               |
|--------|---------------------|---------------------|
| 3257   | 0.094in<br>(2.39mm) | 0.062in<br>(1.57mm) |
| 3258   | 0.125<br>(3.17mm)   | 0.093in<br>(2.36mm) |

Excellent for riveting to panels or boards.

Fits standard 0.166in (4.22mm) dia. banana jack

Material: Banana Plug Body: brass; Spring: beryllium copper; Finish: nickel plating.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage, 15A.

Sold in pkgs. of 10.

#### **Insulated Banana** Plug and Jack with Flexible Boot, Solder or Crimp



5167/5168 Jacks

| Model# | Accepts<br>wire AWG | Туре | Mates<br>with |
|--------|---------------------|------|---------------|
| 5169-* | 22, 20, 18          | Plug | Jack 5167     |
| 5170-* | 16, 14              | Plug | Jack 5168     |
| 5167-* | 22, 20, 18          | Jack | Plug 5169     |
| 5168-* | 16, 14              | Jack | Plug 5170     |
|        |                     |      |               |

Ideal for making patch cords or field repairs. Snap-on flexible PVC boot allows wire to be crimped or soldered to banana plug or jack.

Fits standard 0.166in (4.22mm) dia. banana jack.

Material: Boot: Banana Plug Body: brass; Spring: beryllium copper; Finish: nickel plating; Jack: nickel plated brass.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +122°F (+50°C,) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Rivet Type Banana Plug with Turret**



#### Model# 3261

Excellent for riveting to panels or boards. Solder turret for rapid attachment of wires.

Fits standard 0.166in (4.22mm) dia. banana jack

Material: Banana Plug Body: brass; Spring: beryllium copper; Finish: nickel plating.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A.

Sold in pkgs. of 10.

#### **Banana Plug** with Screw and **Soldering Lug**



| Model# | Thread                 |
|--------|------------------------|
| 3265   | 6-32 x 0.25in (6.35mm) |
| 3266   | 8-32 x 0.25in (6.35mm) |

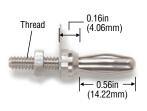
Fits standard 0.166in (4.22mm) dia. banana iack.

Material: Banana Plug Body: brass; Spring: beryllium copper; Finish: nickel plating.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage, 15A.

Sold unassembled, in pkgs. of 10.

#### **Banana Plug with** Threaded Stud and Solder Lug



| Model# | Thread                 |
|--------|------------------------|
| 3263   | 6-32 x .50in (12.70mm) |
| 3264   | 8-32 x .50in (12.70mm) |

Fits standard 0.166in (4.22mm) dia. banana jack

Material: Banana Plug Body: brass; Spring: beryllium copper; Finish: nickel plating.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage.15A.

Sold unassembled, in pkgs. of 10.

#### 4mm Banana Plug with Threaded M3 Stud



#### Model# 72918

4mm plug with threaded M3 stud. 2 nuts: 12mm (0.5in) stud length.

Sold unassembled, in pkgs. of 10.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage, 36A.

34



#### **DIY 4mm Banana Plug for Quick Wire Attachment**





| Model#  | Color  |
|---------|--------|
| 73090-0 | Black  |
| 73090-2 | Red    |
| 73090-4 | Yellow |
| 73090-5 | Green  |
| 73090-6 | Blue   |
| 73090-9 | White  |

Attach wires easily with a spring-loaded push-button tab for quick wire assembly.

Make 4mm banana plug patch cords conveniently in the field.

Material: Contact: nickel-plated brass/steel; Insulation: polypropylene/ polyoxymethylene.

Rating: 33 Vac/70 Vdc, 20A. Accepts: 18-22 AWG wire.

#### **DIY Stackable** 4mm Banana Plug for Quick Wire **Attachment**





| Model#  | Color  |
|---------|--------|
| 73092-0 | Black  |
| 73092-2 | Red    |
| 73092-4 | Yellow |
| 73092-5 | Green  |
| 73092-6 | Blue   |
| 73092-9 | White  |

Stackable for chaining additional connections and test versatility.

Attach wires easily with a springloaded push-button tab for quick wire assembly.

Material: Contact: nickel-plated brass/steel; Insulation: polypropylene/polyoxymethylene.

Rating: 33 Vac/70 Vdc, 36A. Accepts: 18-22 AWG wire.

#### **DIY Sheathed** 4mm Banana **Plug for Quick Wire Attachment**

- 1.195in (30.4mm) -





| Model#  | Color |
|---------|-------|
| 73091-0 | Black |
| 73091-2 | Red   |

Banana plug contact is sheathed for higher voltage and added protection.

Attach wires easily with a spring-loaded push-button tab for quick wire assembly.

Make 4mm banana plug test leads conveniently in the field.

Material: Contact: nickel-plated brass/ steel; Insulation: polypropylene/ polyoxymethylene.

Rating: \*CAT II 600 V/CAT III 300 V, 20A.

Accepts: 18-22 AWG wire.

\*When plug is correctly assembled and

#### **DIY Retractable Sheath 4mm** New **Banana Plug** for Quick Wire Attachment, Stackable



| Model#  | Color  |
|---------|--------|
| 73093-0 | Black  |
| 73093-2 | Red    |
| 73093-4 | Yellow |
| 73093-5 | Green  |
| 73093-6 | Blue   |
| 73093-9 | White  |



Retractable sheath allows for interfacing either sheathed or unsheathed 4mm banana jacks.

Stackable for chaining additional connections and test versatility

Attach wires easily with a springloaded push-button tab for quick wire assembly.

Material: Contact: nickel-plated brass/steel; Insulation: polyamide/ polypropylene/polyoxymethylene. Rating: 33 Vac/70 Vdc, 36A.

Accepts: 18-22 AWG wire.

#### **Top Loading Binding Posts for Quick** Wire Attachment



| Model#  | Color |
|---------|-------|
| 73094-0 | Black |
| 73094-2 | Red   |





Secure wires quickly. Mounts are a #8 hole.

Great for any applications where a standard 5-Way or Spring Loaded Binding Post are used.

Material: Body: Nickel-plated brass; Insulation: Valox.

Rating: 33 Vac/70 Vdc, 15A; 1000 V. Maximum voltage for hands free use: 1000 V. Do not use on circuits where transient stresses can exceed the rated voltage

Accepts: up to 15 AWG wire gauge.

#### **Panel Mount IEC61010 Banana Jacks for Sheathed Plugs**



| Model#  | Color | Terminal                        |
|---------|-------|---------------------------------|
| 72912-0 | Black | Threaded Stud                   |
| 72912-2 | Red   | -                               |
| 72913-0 | Black | Solder Tab                      |
| 72913-2 | Red   | -                               |
| 72930*  | -     | Threaded Stud,<br>Hexagonal Nut |

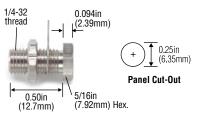
Material: Gold-plated nickel (72912 and 72913)

Rating: 1000V CAT III, 36A max.

\*Std. Colors: all except-3 orange, see

Sold in packages of 10 per color

#### **Uninsulated Banana Jack**



#### Model# 3267

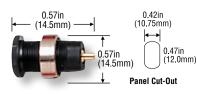
Fits standard banana plug.

Material: nickel-plated brass.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A.

Replacement hex nuts available on page 39.

#### **Panel Mount IEC61010** 4 mm (0.16in) Banana Jack for Sheathed Plugs



#### Model# 5931-\*

Accepts flexible test lead sets 5907A. 5908A, 5909A available on page 68.

Max. Panel Thickness: 0.28in (7.0 mm).

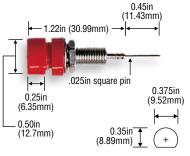
Insulation: Nylon.

Rating: 1000V CAT III per IEC61010-031 and IEC61010-1,

\*Std. Colors: -0 Black, -2 Red, -5 Green, -6 Blue, -9 White.

Sold in pkgs. of 10 per color.

#### **Banana Jack with Wire Wrap Terminal**



Panel Cut-Out

#### Model# 4005-\*

Material: Jack: nickel-plated brass: Terminal: gold-plated phosphor bronze; Insulation: polycarbonate.

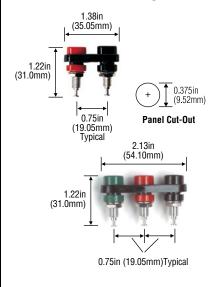
Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 3A, +239°F (+115°C) max.

\*Std. Colors: -0 Black, -2 Red.

Sold in pkgs. of 10 per color.

Replacement hex nuts available on page 39.

#### **Panel Mount Banana Jacks with Mounting Base**



| Model# | Mounting Base    |
|--------|------------------|
| 2269-* | Double           |
| 5233-0 | Double High-Temp |
| 4601-0 | Triple           |

Mounts in panels from 0.063in (1.60mm) to 0.375in (9.53mm) thick. One black, one red. Triple has green.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A.

Temp: +239F (+115°C) [5233-0: +220°F (+428°C)].

\*Mounting base color: -0 Black,

Replacement hex nuts available on page 39.

#### **Panel Mount Banana** Jacks for Sheathed **Plugs**



0.50in

**Panel Cut-Out** 

(12.70mm)

press-in style. 1000 Vrms., 15A Sold in packages of 10.

6387-T-P-C Color Options: **Plating Option:** Terminal Type:

Model# Std. Colors 6387-ST-T-\* -0 Black, -2 Red These banana jacks fit most DMM plugs and

all sheathed Pomona plugs. Available with several different terminals. Threaded and Rating: Designed to meet IEC61010 CAT III

Comes with Hex Nut and Lock Washer. Replacement hex nuts available on page 39.

> -0 Black. -2 Red. T=Tin ST = Solder Turret

36



#### **Terminal Strip Banana Jack Adapter**



| Model# | Thread | Vrms | Torque In/Lb | X Stud Length   |
|--------|--------|------|--------------|-----------------|
| 5699-* | 6-32   | 1100 | 7            | 0.25in (6.35mm) |
| 5700-* | 8-32   | 1600 | 16           | 0.32in (8.13mm) |
| 5701-* | 10-32  | 1700 | 25           | 0.32in (8.13mm) |

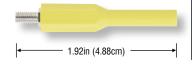
This adapter provides a banana jack connection by replacing the screw in a terminal strip. Secure connections can be made with standard banana plug patch cords without breaking the connection to the terminal strip. Banana jack 0.166in (4.22mm) dia.

Material: Banana Jack: nickel-plated brass; Insulation: Nylon.

\*Std. Colors: -0 Black, -2 Red, -3 Orange, -4 Yellow, -9

Ratings: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: (see chart for Vrms for each model#). Do not use on circuits where transient stresses can exceed the rated voltage. 25A, +216°F (+102°C) max.

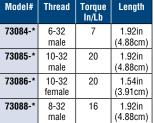
#### **Terminal Strip Banana** Jack Adapter



Easily connect safety sheathed banana plug test leads to terminal strips via this Terminal Strip Banana Jack Adapter.

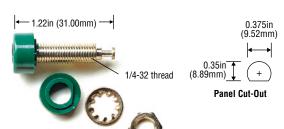
Material: Contacts: nickel-plated brass, Insulation: polypropylene.

\*Std. Colors: -0 Black, -2 Red, -4 Yellow,



Rating: For CE Compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 600 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage. 20A, -10° C to +80° C (+14º F to 176º F).

#### Panel Mount Banana Jack



| Model# | Plating    | Insulation            | Std. Colors  |
|--------|------------|-----------------------|--|
| 1581-* | Bright tin | Polycarbonate         | -0 Black, -1 Brown, -2 Red, -3 Orange, -4 Yellow,<br>-5 Green, -6 Blue, -7 Violet, -8 Gray, -9 White |
| 2854-* | Gold       | Polycarbonate         | -0 Black, -1 Brown, -2 Red, -4 Yellow,<br>-5 Green, -6 Blue, -8 Gray, -9 White                       |
| 4900-* | Bright tin | Polyphenylene Sulfide | -0 Black, -6 Blue  |

Mounts in panels ranging in thickness from 0.063in (1.60mm) to 0.375in (9.53mm).

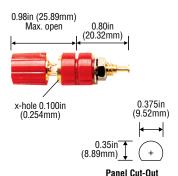
Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc.

Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +239°F (+115°C) max. (Model 4900, +428°F (+220°C) max.).

Mounting Bases and replacement hex nuts available on page 39.

Sold in pkgs. of 10 per color.

#### **Binding Posts**



| Model# | Material                     |
|--------|------------------------------|
| 3750-* | Gold-plated brass            |
| 3760-* | Bright tin-plated brass      |
| 3770-* | Gold-plated tellurium copper |

Insulation: Polycarbonate

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +239°F (+115°C) max.

\*Std. Colors: 3750 and 3760: all 10 colors. 3770: -0 Black, -2 Red.

Sold unassembled.

#### **Binding Post with Double Mounting**



Panel Cut-Out

#### Model# 4243-\*

Accepts standard banana plugs and 0.080in (2.03mm) pin tips, wires and probe tips in 0.10in (2.54mm) cross-hole.

One black and one red binding post.

Material: Binding Post: bright tin-plated brass; Insulation: polycarbonate.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +239°F (+115°C) max.

\*Mtg. Base Colors: -0 Black, -2 Red.



#### **Dual Binding Posts**



| Model# | Base        |
|--------|-------------|
| 6883   | Standard    |
| 6884   | Raised Base |

5-way binding post with 3.91 mm (0.154 in) cross-hole that accepts up to 12 AWG wire and standard banana plugs. Posts are spaced at the standard 3/4 inch spacing to mate to dual banana plugs.

**Material:** *Binding Post:* nickel-plated brass. *Insulators:* nylon.

Rating: 30A current.





Panel Cut-Out for 6883/6884

#### **Spring Loaded Binding Post**



#### Model# 4770-\*

Mounts in panels from 0.06in (1.6mm) to 0.38in (9.53mm) thick.

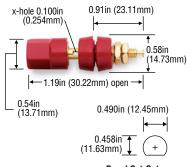
Accepts wires or plugs up to 0.08in (2.16mm) dia. with insulation up to 0.16in (4.06mm).

**Material:** *Body:* tin plated brass; *Insulation:* polycarbonate.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 630 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +239°F (+115°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Hex Head Binding Post**



Panel Cut-Out

#### Model# 5018-\*

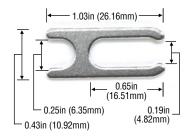
Meets MIL-P-55149/1A.

Material: Binding Post Body, Nuts, Lockwasher: gold-plated brass; Insulation: Nylon MIL-P-20693.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1500 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage. 30A, +176° (+80°C) max.

\*Std. Colors: -0 Black, -2 Red, -4 Yellow, -5 Green, -6 Blue, -9 White.

#### Shorting Link for Standard Binding Posts



#### Model# 4115

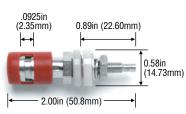
Solid shorting link for binding posts.

Material: nickel-plated brass.

Rating: 15A.
Sold in pkgs. of 10.

Fits Binding Posts on 0.750in (19.05mm) centers.

# **Spring Loaded Binding Post**



#### Model# 4995-\*

Meets MIL-P-55149/8.

Silicone rubber O-rings provide water resistant seal when mounted in panels from 0.062in to 0.125in (15.75mm to 3.18mm) thick.

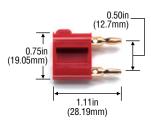
Material: Nickel-plated brass.

\*Std. Colors: -0 Black, -2 Red.



Panel Cut-Out

#### Miniature Double Banana Plug with Set Screws, Stackable, Solderless



#### Model# 2244-\*

Internal set screws secure cable up to 0.15in (3.81mm) dia. or components.

Plugs fit miniature 0.104in (2.64mm) dia.

Material: Banana Plug/Jack: brass; Spring: beryllium copper; Finish: gold plating; Insulation: ABS

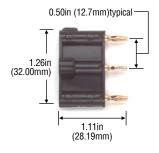
Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.

38



#### **Miniature Solderless** TypeTriple Banana **Plug with Wire Guide**



#### Model# 4653-0

Use for balanced line 2 conductor shielded cable assemblies

Material: Banana Plug/Jack: brass; Spring: beryllium copper; Finish: gold plating; Insulation: ABS.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

Cable strain relief I.D. 0.19in (4.82mm). Setscrews secure wires.

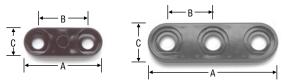
#### Replacement **Hex Nuts**



| Model# | Qty. | Finish | Wrench<br>Size | Nut Thickness    | Thread |
|--------|------|--------|----------------|------------------|--------|
| 6549   | 500  | Nickel | 3/16in         | 0.65in (16.51mm) | 4-40   |
| 6547   | 500  | Nickel | 1/4in          | 0.95in (24.13mm) | 6-32   |
| 6440   | 500  | Nickel | 1/4in          | 0.95in (24.13mm) | 8-32   |
| 6548   | 100  | Gold   | 3/8in          | 0.95in (24.13mm) | 10-32  |
| 6441   | 500  | Nickel | 3/8in          | 0.95in (24.13mm) | 1/4-32 |
| 6389   | 100  | Nickel | 9/16in         | 0.95in (24.13mm) | 1/2-28 |

| Hex Nut | 6549         | 6547                 | 64   | 40   | 6548 | 6441   | 6389         |
|---------|--------------|----------------------|--|--|------|--|--------------|
| Fits on | 3276<br>4513 | 3263<br>4511<br>6271 | 2142<br>2143<br>2382<br>2383<br>2439<br>2440<br>3264<br>3542<br>3750<br>3760 | 3770<br>4022<br>4098<br>4243<br>4512<br>4543<br>4773<br>6272 | 5018 | 1581<br>2269<br>2854<br>3267<br>4005<br>4069<br>4601<br>4900<br>5233<br>6270 | 4921<br>6387 |

#### **Binding Post/Banana Jack Mounting Bases**



For binding post models 3750, 3760, 3770

| Model# | Type   | Used with     | A                | В                | C                |
|--------|--------|---------------|------------------|------------------|------------------|
| 3862-* | Double | Standard      | 1.19in (30.22mm) | 0.75in (19.05mm) | 0.44in (11.18mm) |
| 3863-* | Triple | Binding Posts | 1.94in (49.28mm) | 0.75in (19.05mm) | 0.44in (11.18mm) |
| 4619-* | Double | Miniature     | 0.87in (22.09mm) | 0.50in (12.70mm) | 0.38in (9.65mm)  |
| 4614-* | Triple | Banana Jacks  | 1.38in (35.05mm) | 0.50in (12.70mm) | 0.38in (9.65mm)  |
| 4654-* | Double | Standard      | 1.38in (35.05mm) | 0.75in (19.05mm) | 0.63in (16.00mm) |
| 4590-* | Triple | Banana Jacks  | 2.13in (54.10mm) | 0.75in (19.05mm) | 0.63in (16.00mm) |

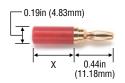
Mount banana jacks and binding posts at standard Rating: +239°F (+115°C) Max. 0.75in (19.05mm) spacing.

Material: polycarbonate

\*Std. Colors: -0 Black.

Sold in pkgs. of 10.

#### **Miniature Solder** Type Banana Plug



| Model# | Insulator Length (X) |
|--------|----------------------|
| 3690-* | 0.45in (11.43mm)     |

Sold in pkgs. of 10

Material: Banana Plug Body: brass; Spring: beryllium copper; Finish: gold plating; Insulation: nylon.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +176°F (+80°C) max.

\*Std. Colors: -0 Black, -2 Red.

Fits miniature 0.104in (2.64mm) dia. banana jacks.

#### **Miniature Banana** Plug with Threaded Stud



|  | Model# | X Length          |  |
|--|--------|-------------------|--|
|  | 3276   | 0.230in (5.84mm)  |  |
|  | 4513   | 0.480in (12.19mm) |  |

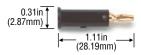
Fits miniature 0.104in (2.64mm) dia. banana jacks. Furnished with 4-40 hex nut, 4-40 threaded stud.

Material: Banana Plug Body: brass; Spring: beryllium copper; Finish: gold plating.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A.

Replacement hex nut available on page 39. Sold unassembled, in pkgs. of 10.

#### **Do-It-Yourself Miniature Banana** Plug, Stackable, Solderless



#### Model# 2944-\*

Fits miniature 0.104in (2.64mm) dia. banana

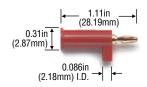
Wire firmly held in place with internal set

Material: Banana Plug/Jack: brass; Spring: beryllium copper; Finish: gold plating; Insulation: ABS.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A,  $+122^{\circ}F$  ( $+50^{\circ}C$ ) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Do-It-Yourself Miniature Banana** Plug with Safety Shield, Stackable, **Solderless**



#### Model# 2945-\*

Fits miniature 0.104in (2.64mm) dia. banana jacks.

Wire firmly held in place with internal set

Material: Banana Plug/Jack: brass; Spring: beryllium copper; Finish: gold plating; Insulation: ABS

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Miniature Double Banana Plug Shorting Bar**



#### Model# 3030

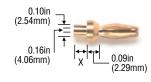
Center hole accepts 4-40 screw.

Material: Banana Plug Body: brass; Spring: beryllium copper; Finish: gold plating.

**Rating:** 5A. Resistance less than 1.5 m $\Omega$ .

Fits Miniature Binding Posts and Miniature Banana Jacks on 0.5in (12.70mm) centers.

#### **Miniature Rivet Type Banana Plug**



| Model# | Panel               | X Dim.              |
|--------|---------------------|---------------------|
| 3268   | 0.062in<br>(1.57mm) | 0.094in<br>(2.39mm) |
| 3271   | 0.093in<br>(2.36mm) | 0.125in<br>(3.17mm) |
| 3272   | 0.125in<br>(3.17mm) | 0.156in<br>(3.96mm) |

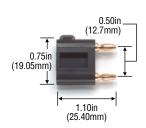
Fits miniature 0.104in (2.64mm) dia. banana

Material: Banana Plug Body: brass; Spring: beryllium copper; Finish: gold plating.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A

Sold in pkgs. of 10.

#### **Miniature Double Banana Plug with Shorting Bar**



#### Model# 2035-\*

Plugs fit miniature 0.104in (2.64mm) dia. banana jacks.

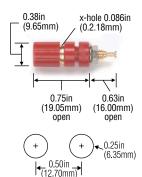
Banana plugs internally shorted with 18 AWG

Material: Banana Plug/Jack: brass; Spring: beryllium copper; Finish: gold plating; Insulation: ABS.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

\*Std. Colors: -0 Black. -2 Red.

#### Miniature Binding **Post**



**Panel Cut-Out** 

| Model# | Plating |
|--------|---------|
| 2382-* | Gold    |
| 2439-* | Tin     |

Accepts miniature banana plug.

8-32 hex nut and lockwasher included.

Material: Binding Post Body, Nut: brass; Lockwasher: steel; Insulation: polycarbonate.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +239°F (+115°C) max.

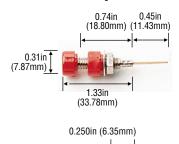
\*Std. Colors: -0 Black, -2 Red.

Replacement hex nuts available on page 39.

40



#### **Miniature Banana Jack** with Wire Wrap Terminal



Panel Cut-Out

#### Model# 4022-\*

Accepts miniature banana plugs.

Mounts in panels up to 0.250in (6.35mm) thick.

Material: Jack: nickel-plated brass; Terminal: gold-plated phosphor bronze; Insulation: polycarbonate.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 3A, +239°F (+115°C) max.

\*Std. Colors: -0 Black, -2 Red. Sold unassembled, in pkgs. of 10.

#### **Miniature Banana** Jack, Panel Mount





**Panel Cut-Out** 

#### Model# 2142-\*

Accepts miniature banana plugs. Mounts in panels up to 0.250in (6.35mm) thick.

Material: gold-plated brass; Insulation: polycarbonate.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +239°F (+115°C) max.

\*Std. Colors: -0 Black, -2 Red, -3 Orange, -4 Yellow, -5 Green, -6 Blue, -9 White.

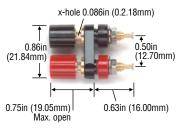
Uses hex nut 6440.

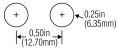
Replacement hex nuts available on page 39. Sold unassembled, in pkgs. of 10 per color.

#### **Miniature Insulated Binding Post with Double Mounting Base**

0.234in

(59.44mm)





**Panel Cut-Out** 

| Model# | Plating |
|--------|---------|
| 2383-* | Gold    |
| 2440-* | Tin     |

Accepts miniature banana plugs.

8-32 hex nut and lockwasher included.

Material: Binding Post Body, Nut: brass; Lockwasher: steel; Insulation: polycarbonate.

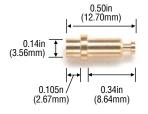
Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +239°F

\*Mounting Base Colors: -0 Black, -2 Red.

\*Std. Colors: 2383: -0 Black, -2 Red. 2440: -0 Black

Replacement hex nuts available on page 39.

# **Miniature Rivet Type Banana Jack with**



#### Model# 3277

Accepts miniature banana plugs. Mounts in panels up to 0.062in (1.57mm)

Material: Gold-plated brass.

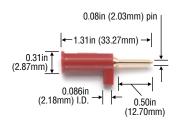
Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A.

Sold in pkgs. of 10.

Rec. Mounting Hole:  $.140 \pm .002$  (9/64

Panel Thickness: 0.062in (1.57mm)

#### **Do-It-Yourself Pin Tip Plug with Safety** Shield, Stackable, **Solderless**



#### Model# 3548-\*

Accepts miniature banana plug. Wire firmly held in place with internal set screw

Material: Pin Tip Plug/Jack: gold-plated brass; Insulation: ABS.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 3000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage.5A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Miniature Banana Jack** in Double Mounting **Base, Panel Mount**





**Panel Cut-Out** 

#### Model# 2143-\*

Accepts miniature banana plugs. Mounts in panels up to 0.188in (4.78mm) thick.

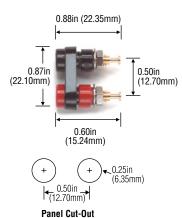
Material: gold-plated brass; Insulation: polycarbonate.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +239°F (+115°C) max.

\*Std. Mounting Base Colors: -0 Black,

Colors: One black and one red jack.

#### Pin Tip Jacks with **Double Mounting Base**



#### Model# 4543-\*

Accepts 0.08in (2.03mm) dia. pin. Max. panel thickness 0.188in (4.78mm).

Material: Jack: gold-plated brass; Spring: beryllium copper; Insulation: polycarbonate.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +239°F (115°C) max.

\*Mtg. Base Colors: -0 Black, -2 Red.

#### Do-It-Yourself .080in (20.32mm) Dia. Pin Tip Plug with Flexible Boot, **Solder or Crimp**



| Model# | Accepts Wire AWG |
|--------|------------------|
| 5173-* | 22, 20,18        |

Ideal for making patch cords or field repairs. Snap-on flexible PVC boot allows wire to be crimped or soldered to pin tip plug.

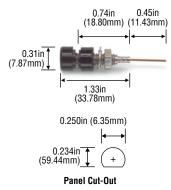
Material: nickel-plated brass.

Accepts 18-22 AWG wire.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 3000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

\*Std. Colors: Available in 10 colors.

### **Insulated Pin Jack with Wire Wrap Terminal**



#### Model# 4773-\*

Accepts 0.080in (2.03mm) dia. pin. Max. panel thickness 0.25in (6.35mm).

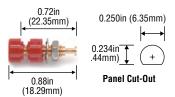
Material: Jack: nickel-plated brass; Spring: gold-plated beryllium copper; Terminal

gold-plated phosphor bronze; Insulation: polycarbonate.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 3A, +239°F (+115°C) max.

\*Std. Colors: -0 Black, -2 Red, -6 Blue, -9 White

#### Pin Tip Jack



#### Model# 3542-\*

Accepts 0.080in (2.03mm) dia. pin.

Jack: gold-plated brass; Spring: beryllium copper; Insulation: polycarbonate.

For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage.5A, +239°F (115°C) max.

-0 Black, -2 Red, -3 Orange, -4 Yellow, -5 Green, -6 Blue, -9 White.

Sold in pkgs. of 10.

#### **Do-It-Yourself In-Line** 4mm (0.16in) Banana Plug



#### Model# 5934-\*

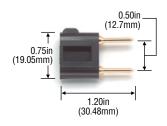
Wire connection by set screw. Accepts 18. 20 and 22 AWG wire.

Material: Insulation: Nylon.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum, Maximum voltage for hands free use: 750 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage.25A

\*Std. Colors: -0 Black. -2 Red. Sold in pkgs. of 10 per color.

#### **Double Pin Tip Plug** with Shorting Bar



#### Model# 3452-\*

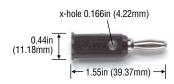
Accepts pin tip plugs. Internally shorted with 20 AWG wire. Use as connecting link for 0.50in (12.70mm) spaced pin tip jacks.

Pin Tip Plug/Jack: brass; Spring: beryllium copper; Finish: gold plating; Insulation: ABS.

For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 3000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +239°F (+115°C) max.

-0 Black, -2 Red.

#### Pin Tip Jack to **Banana Plug**



#### Model# 1809-\*

Accepts 0.080in (2.03mm) pin tip plug or probe tip. Fits standard 0.166in (4.22mm) dia. banana jack.

Material: gold-plated beryllium copper.

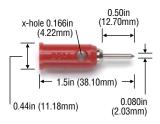
Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

\*Std. Color: -0 Black, -2 Red.

Sold in pkgs. of 10.



#### **Banana Jack to Pin** Tip Plug



#### Model# 1432-\*

Use to mate standard banana plug patch cords to equipment having pin jacks.

Material: Jack/Plug: nickel-plated brass; Insulation: polypropylene.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 3000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

\*Std. Colors: -0 Black. -2 Red. Sold in pkgs, of 10.

#### **Banana Jack to** .080in (2mm) Dia. Pin Tip Jack



#### Model# 3834-\*

Adapts standard 0.166in (4.22mm) dia. banana plug to 0.080in (2.03mm) dia. pin

Material: Banana Jack: nickel-plated brass; Pin Jack: gold-plated beryllium copper; Insulation: polypropylene.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 3000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +131°F (+55°C) max.

\*Std Colors: -0 Black.

#### 2mm Banana Jack



**Panel Cut-Out** 

#### Model# 5935-\*

Max. Panel Thickness: 0.31in (8mm)

Material: Insulation: nylon; Finish: nickel

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A,  $\leq 2 \text{ m}\Omega$ .

\*Std. Colors: -0 Black.

Sold in pkgs. of 10 per color.

Not compatible with Miniature Banana Plug or Pin Tip.

#### **Double Banana Plug** with Binding Posts, Stackable, Solderless



| Model# | Plating |
|--------|---------|
| 1286   | Nickel  |
| 5405   | Gold    |

Features insulated binding posts on 0.750in (19.05mm) centers for rapid mounting and interchangeability of components. Center cross hole 0.166in (4.22mm) dia. provides

Material: Binding Post/Banana Plug Body: brass; Spring: beryllium copper; Insulation:

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +122°F (+50°C) max.

Color: Black.

#### Banana Jack to Miniature Banana Plug



#### Model# 2138-\*

Use to mate standard 0.166in (4.22mm) dia. banana plug to equipment having miniature banana jacks.

Material: Jack: nickel-plated brass: Spring: nickel-plated beryllium copper; Insulation: ABS.

Rating: For CE compliance and for personalsafety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/ 60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

\*Std. Color: -0 Black, -2 Red. Sold in pkgs. of 10.

#### 2mm Banana Plug



#### Model# 5936-\*

Solder type wire connection.

Accepts 18-22 AWG wire.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/ 60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 500 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage,  $5A \le 2 \text{ m}\Omega$ .

\*Std. Colors: -0 Black, -2 Red.

Assembled Length: 1.07in (27.2 mm).

Sold unassembled, in pkgs. of 10 per

Not compatible with Miniature Banana Plug or Pin Tip.

#### **Binding Post to** Banana Pluq



#### Model# 2894-\*

Features insulated binding post for rapid mounting and interchangeability of components. Accepts standard banana plug. Center cross hole 0.166in (4.220mm) dia. provides side stackup connection.

Material: Binding Post/Banana Plug Body: nickel-plated brass; Spring: nickelplated beryllium copper; Insulation: polypropylene

Rating: For CE compliance and for personalsafety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/ 60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +122°F (+50°C) max.

\*Binding Post Colors: -0 Black, -2 Red.

#### **Insulated Double Banana Plug Shorting Bar with Binding Post**

# 0.75in (19.05mm) 1 35in (34.29mm) 1.78in(45.21mm) Max. open

#### Model# 5165-\*

Fits standard banana jack.

Shorting bar is completely insulated in clear ABS thermoplastic.

Material: Binding Post/Banana Plug Body/ Shorting Bar: nickel-plated brass; Spring: nickel-plated beryllium copper; Insulation: polycarbonate.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +122°F (+50°C) max.

\*Binding Post Colors: -0 Black, -2 Red.

#### Spade Lug to **DMM Banana** Jack

| Model#  | A               | В               | Lug Size |
|---------|-----------------|-----------------|----------|
| 3744A-* | 0.14in (3.56mm) | 0.24in (6.10mm) | 4, 5, 6  |
| 3777A-* | 0.2in (5.0mm)   | 0.30in (7.7mm)  | 8, 10    |



Plugs into DMM leads. Permits DMM leads to be used with equipment having barrier strips, or binding post.

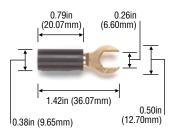
Material: Banana Jack: nickel-plated brass; Spade Lug: tin-plated copper; Insulation: polypropylene.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red, -02 Set of one black and one red.

# Model# 6481 **Test Connector Adapter Set** Full set of pin and socket adapters. 18 piece set includes one black and red pin and socket of each size. Includes Silicone insulated 4ft (1.21m) leads to fit most DMMs from Fluke, Amprobe, Greenlee and others.

#### **Low Thermal EMF Insulated Spade Lug** to Banana Jack



#### Model# 2305

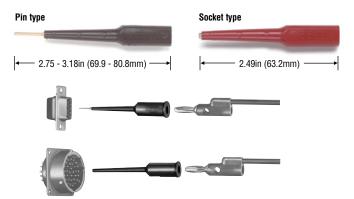
Special alloy and plating preserve the accuracy of low voltage measurement equipment. Thermal effects are minimized. Heavy construction for minimum voltage loss. Mates with low voltage banana plug patch cords and binding posts.

Material: Jack and Spade Lug: gold-plated tellurium copper; Insulation: ARS

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage.15A, +122°F (+50°C) max.

Set of one red and one black.

#### **Connector Test Adapters**



| Model# | AWG  | Contact Size        | Туре                | Current<br>Rating |    |
|--------|------|---------------------|---------------------|-------------------|----|
| 4690-* | 22   | 0.020in (0.76mm)    | Socket              |                   |    |
| 4691-* | 1 22 | 0.030in (0.76mm)    | Pin                 |                   |    |
| 3560-* | 20   | 0.040in (1.02mm)    | Socket              |                   |    |
| 3561-* |      |                     | Pin                 | ٠,                |    |
| 3562-* | 16   | 40                  | 10 0.000in (1.00mm) | Socket            | 3A |
| 3563-* |      | 16 0.063in (1.60mm) | Pin                 |                   |    |
| 3564-* | 12   | 12 0.093in (2.36mm) | Socket              |                   |    |
| 3565-* |      |                     | Pin                 |                   |    |

An ideal test adapter for rapid testing of the hard-to-get at contacts of multi-pin/ socket connectors. Flexible tip allows testing of adjacent contacts. Flexibility and full insulation protects against shorting or contact damage. Model 4690 also fits 0.025in (0.63mm) sq. pins.

Material: Banana Jack: nickel-plated brass; Socket: gold-plated copper; Pin: gold-plated brass; Insulation: PVC.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum, Maximum voltage for hands free use: 2500 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. +122°F (+50°C) max.

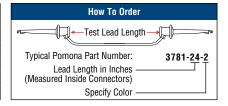
\*Std. Colors: -0 Black, -2 Red.

# Patch Cords and Test Leads

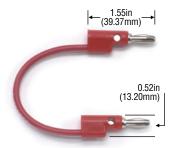
Pomona has made it easy for you to have exactly what you need with a huge selection of patch cords and test leads designed for reliable, convenient connections. Whether you need a test lead that can access an IC pin without shorting or a patch cord that accommodates multiple stacking, Pomona Electronics' design and reliability are your connection with quality.

#### Wire Specifications

| Wire<br>Designation | AWG | Description      | O.D.             | Jacket   | Temperature Range            | Color             |
|---------------------|-----|------------------|------------------|----------|------------------------------|-------------------|
| В                   | 18  | 65/36 copper     | 0.144in (3.66mm) | PVC      | -4 to 221°F (-20 to +105°C)  | 10 Colors         |
| Silicone            | 18  | 65/36 copper     | 0.144in (3.66mm) | Silicone | -58 to 302°F (-50 to +150°C) | Black and Red     |
| P                   | 20  | 41/35 copper     | 0.087in (2.20mm) | PVC      | -4 to 221°F (-20 to +105°C)  | 10 colors         |
| PTO                 | 22  | 26/36 copper     | 0.064in (1.62mm) | PVC      | -4 to 221°F (-20 to +105°C)  | 10 colors         |
|                     | 12  | 7 x 38/36 copper | 0.144in (3.66mm) | PVC      | 140°F (+60°C)                | Black, Red, Green |



#### Multi-Stacking Banana **Plug Patch Cord**



| Model#    | Length      | Special Features   |
|-----------|-------------|--------------------|
| 2948-12-* | 12in (0.3m) |                    |
| 2948-24-* | 24in (0.6m) |                    |
| 2948-36-* | 36in (0.9m) | Gold-plated finish |
| 2948-48-* | 48in (1.2m) |                    |
| 2948-60-* | 60in (1.5m) |                    |

Model 2948 Multi-Stacking Banana Plug Patch Cord features a gold-plated finish.

| Model# | Length      |
|--------|-------------|
| B-4-*  | 4in (0.1m)  |
| B-8-*  | 8in (0.2m)  |
| B-12-* | 12in (0.3m) |
| B-18-* | 18in (0.5m) |
| B-24-* | 24in (0.6m) |
| B-36-* | 36in (0.9m) |
| B-48-* | 48in (1.2m) |
| B-60-* | 60in (1.5m) |
| B-72-* | 72in (1.8m) |

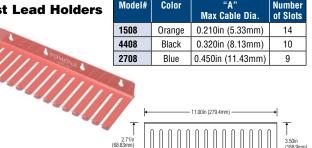
Model B: Multi-Stacking Banana Plug Patch Cord features a nickel-plated finish.

Cable: 18 AWG Wire, 0.144in (3.56mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +131°F (+55°C) max.

\*Std. Colors: Available in 10 Colors.

#### **Test Lead Holders**



#### Multi-stacking Sheathed (4mm) Banana Plug **Patch Cord**

#### Model# 6727-\*

4ft (1.2 meter) stackable safety lead.

Material: Contacts: nickel-plated brass: Wire: multi-strand copper,

Insulation: silicone.

Rating: IEC61010 1000V CAT III, 20A max (10A cont.), 14 to 131°F (-10 to +55°C).

\*Std. Colors: -0 Black only, -2 Red only.

#### **Horizontal Stacking Banana Plug Patch Cord**



| Model#  | Length      |
|---------|-------------|
| HB-12-* | 12in (0.3m) |
| HB-24-* | 24in (0.6m) |
| HB-36-* | 36in (0.9m) |
| HB-48-* | 48in (1.2m) |
| HB-60-* | 60in (1.5m) |

Cable: 18 AWG Wire, 0.144in (3.56mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +131°F (+55°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Cross Stacking Banana Plug Patch Cord**



| Model#    | Length      |
|-----------|-------------|
| 1440-12-* | 12in (0.3m) |
| 1440-18-* | 18in (0.5m) |
| 1440-24-* | 24in (0.6m) |
| 1440-36-* | 36in (0.9m) |
| 1440-48-* | 48in (1.2m) |
| 1440-60-* | 60in (1.5m) |

Cable: 18 AWG Wire, 0.144in (3.56mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/ 60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage.15A, +131°F (+55°C) max.

\*Std. Colors: -0 blk, -2 red.

<sup>\*</sup>Std. Colors: -0 Black, -2 Red.

### **Patch Cords and Test Leads**

#### Multi-Stacking Banana Plug to Miniature Stacking Banana Plug



| Model#    | Length      |
|-----------|-------------|
| 3014-36-* | 36in (0.9m) |
| 3014-60-* | 60in (1.5m) |

**Cable:** 20 AWG Wire, 0.087in (2.21mm) 0.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use. 3000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +131°F (+55°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### Multi-Stacking Banana Plug to Minigrabber® Test Clip



| Model#    | Length      |
|-----------|-------------|
| 6249-12-* | 12in (0.3m) |
| 6249-24-* | 24in (0.6m) |
| 6249-36-* | 36in (0.9m) |

Features a slim 0.36in (9.14mm) body width. Hook attaches to component leads up to 0.060in (1.52mm) 0.D.

**Cable:** 18 AWG Silicone insulated wire, 0.144in (3.56mm) 0.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 300V. Do not use on circuits where transient stresses can exceed the rated voltage. 5A.

\*Std. Colors: -0 Black, -2 Red.

#### Multi-Stacking Banana Plug to Minigrabber® Test Clip



| Model#    | Length      |
|-----------|-------------|
| 3782-12-* | 12in (0.3m) |
| 3782-24-* | 24in (0.6m) |
| 3782-36-* | 36in (0.9m) |
| 3782-48-* | 48in (1.2m) |
| 3782-60-* | 60in (1.5m) |

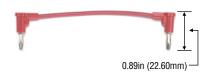
Hook attaches to component leads up to 0.060in (1.52mm) 0.D.

**Cable:** 20 AWG Wire, 0.087in (2.21mm) 0.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 300V. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +131°F (+55°C) max.

\*Std. Colors: -0 Black, -2 Red, -4 Yellow, -5 Green, -6 Blue.

#### Right Angle Stacking Banana Plug Patch Cord



| Model#    | Length      |
|-----------|-------------|
| 2864-24-* | 24in (0.6m) |

**Cable:** 18 AWG Wire, 0.14in (3.56mm) 0.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +131°F (+55°C) max.

\*Std. Colors: -0 Black, -2 Red.

# Minigrabber® Test Clip with Sheathed



| Model#    | Plug Type               | Ratings                     |
|-----------|-------------------------|-----------------------------|
| 6248-12-* | Sheathed<br>Banana Jack | IEC61010-031<br>CAT II 300V |

Test Lead Extender.

Silicone insulated 1ft (0.3m) leads fit on the end of modular test leads such as Pomona 5907A.

Std. Colors: -0 Black, -2 Red.

# Multi-Stacking Banana Plug to Micrograbber® Test Clip



| Model#    | Length      |
|-----------|-------------|
| 5053-24-* | 24in (0.6m) |
| 5053-36-* | 36in (0.9m) |
| 5053-48-* | 48in (1.2m) |

Hook attaches to components up to 0.040in (1.02mm) 0.D.

**Cable:** 20 AWG Wire, 0.087in (2.21mm) 0.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 150V. Do not use on circuits where transient stresses can exceed the rated voltage. 3A, +131°F (+55°C) max.

\*Std. Colors: -0 Black, -2 Red.



#### Minigrabber® Test Clip Leads



| Model#    | Plug Type       | Ratings     |
|-----------|-----------------|-------------|
| 6244-48-* | Right-angle DMM | CAT II 300V |
| 6245-48-* | Straight DMM    | CAT II 300V |

Silicone insulated 4ft (122m) leads fit most meters from Fluke, Wavetek (Meterman), HP, Amprobe, Greenlee and others

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 300 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage.

\*Std. Colors: -0 Black, -2 Red

#### **Double Banana Plug** with Safety Shrouds



| Model#    | Length      |
|-----------|-------------|
| 6283-C-36 | 36in (0.9m) |
| 6283-C-48 | 48in (1.2m) |
| 6283-C-60 | 60in (1.5m) |

Fits Digital Multi-meters and other instruments with shrouded jacks.

Offset design designates hot and ground leads.

Black and red banana plug shrouds. Molded strain relief for long life.

MIL spec coaxial cable.

Overvoltage CAT II, 600V, 5A per IEC61010-031.

#### **Double Banana Plug to** Micrograbber® Test Clips



| Model#    | Length      |
|-----------|-------------|
| 4768-K-24 | 24in (0.6m) |
| 4768-K-36 | 36in (0.9m) |
| 4768-K-48 | 48in (1.2m) |
| 4768-K-60 | 60in (1.5m) |

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 150 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage. +122°F (+50°C) max.

See chart on page 7 for additional cable specifications.

#### **Two Conductor shielded Balanced Line**



| Model#  | Length      |
|---------|-------------|
| 1167-18 | 18in (0.5m) |
| 1167-24 | 24in (0.6m) |
| 1167-36 | 36in (0.9m) |
| 1167-48 | 48in (1.2m) |
| 1167-60 | 60in (1.5m) |

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1000 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage. +131°F (+55°C) max.

Cable Type I: See chart on page 7 for additional cable specifications.

#### **Multi-Stacking Double Banana Plug to** Minigrabber® Test Clips



| Model#    | Length      |
|-----------|-------------|
| 3786-C-18 | 18in (0.5m) |
| 3786-C-24 | 24in (0.6m) |
| 3786-C-36 | 36in (0.9m) |
| 3786-C-48 | 48in (1.2m) |
| 3786-C-60 | 60in (1.5m) |

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 300 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage. +122°F (+50°C) max.

See chart on page 7 for additional cable specifications.

### **Patch Cords and Test Leads**

#### **Multi-Stacking Double to Multi-Stacking Single Banana Plugs**



| Model#    | Length      |
|-----------|-------------|
| 1368-A-18 | 18in (0.5m) |
| 1368-A-24 | 24in (0.6m) |
| 1368-A-36 | 36in (0.9m) |
| 1368-A-48 | 48in (1.2m) |
| 1368-A-60 | 60in (1.5m) |

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 300 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage. +122°F (+50°C) max.

See chart on page 7 for additional cable specifications.

#### **Multi-Stacking Double** Banana Plug, **One End Only**



| Model#    | Length      |
|-----------|-------------|
| 1326-A-60 | 60in (1.5m) |
| 1326-C-60 | 60in (1.5m) |

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: A: 300 Vrms, C: 1400 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage. +131°F (+55°C) max.

See chart on page 7 for additional cable specifications.

#### **Multi-Stacking Banana** Plug to SMD Grabber® **Test Clip**



| Model#    | Length      |
|-----------|-------------|
| 5302-12-* | 12in (0.3m) |
| 5302-24-* | 24in (0.6m) |
| 5302-36-* | 36in (0.9m) |

Pincer Opening: 0.040in (1.02mm).

Cable: 22 AWG Wire, 0.064in (1.63mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 150V. Do not use on circuits where transient stresses can exceed the rated voltage. 0.5A, +131°F (+55°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Multi-Stacking Banana** Plugs, Two Each End



| Model#    | Length      |
|-----------|-------------|
| 2239-C-24 | 24in (0.6m) |
| 2239-C-36 | 36in (0.9m) |
| 2239-C-48 | 48in (1.2m) |

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1400 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage. +131°F (+55°C) max.

See chart on page 7 for additional cable specifications.



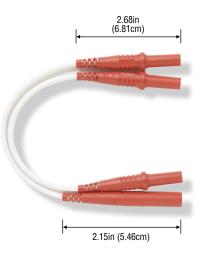
#### **Multi-Stacking Double Banana Plug Cables**



| Model# | Cable Type   | Length      |
|--------|--|-------------|
| 2BA-18 |  | 18in (0.5m) |
| 2BA-24 | Two Conductor Twisted<br>Pair, 18 AWG,<br>0.25in (6.35mm) O.D. | 24in (0.6m) |
| 2BA-36 |  | 36in (0.9m) |
| 2BA-48 |  | 48in (1.2m) |
| 2BA-60 |  | 60in (1.5m) |
| 2BC-24 |  | 24in (0.6m) |
| 2BC-36 | RG58C/U,<br>0.195in (4.95mm) O.D.                              | 36in (0.9m) |
| 2BC-48 |  | 48in (1.2m) |
| 2BC-60 |  | 60in (1.5m) |

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use. 2BA: 300 Vrms, 2BC: 1400 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage. +131°F (+50°C) max.

# **Jumper Test Lead Set**



| Model#      | Length       |
|-------------|--------------|
| 73087-6-*   | 6in (0.15m)  |
| 73087-9-4   | 9in (0.23m)  |
| 73087-12-*  | 12in (0.3m)  |
| 73087-20-4  | 20in (0.5m)  |
| 73087-24-*  | 24in (0.6m)  |
| 73087-36-*  | 36in (0.9m)  |
| 73087-72-*  | 72in (1.8m)  |
| 73087-150-4 | 150in (3.8m) |
| 73087-210-4 | 210in (5.3m) |
|             |              |

Each Jumper Test Lead Set includes a Sheathed (4mm) Banana Plug Test Lead, and Sheathed Banana Plug to Sheathed Banana Jack Patch Cord.

Cable: 18 AWG Wire, 0.146in (3.7mm) O.D.

Insulation: Silicone

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1000 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage, 10A. -4° to +131°F (-20° to +55°C).

\*Std. Colors: -0 Black, -2 Red, -4 Yellow, -6 Blue.



#### **Double Banana Plug to Stacking Pin Tip Plugs**

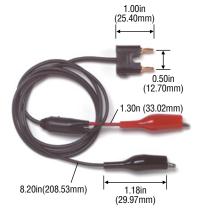


| Model#    | Length      |
|-----------|-------------|
| 2BC-PP-36 | 36in (0.9m) |
| 2BC-PP-48 | 48in (1.2m) |
| 2BC-PP-60 | 60in (1.5m) |

Cable Type: RG58C/U 0.195in (4.95mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1400 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage. +122°F (+50°C) max.

#### **Minigator Clips to Miniature Double Banana Plug**



| Model#    | Length      |
|-----------|-------------|
| 3027-K-24 | 24in (0.6m) |

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 45 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage. +122°F (+50°C) max.

Jaw Opening: 0.187in (4.75mm) See chart on page 7 for additional cable specifications.

#### Minigrabber® Test Clip **Patch Cord**



| Model#    | Length      |
|-----------|-------------|
| 3781-8-*  | 8in (0.2m)  |
| 3781-12-* | 12in (0.3m) |
| 3781-18-* | 18in (0.5m) |
| 3781-24-* | 24in (0.6m) |
| 3781-36-* | 36in (0.9m) |
| 3781-48-* | 48in (1.2m) |
| 3781-60-* | 60in (1.5m) |

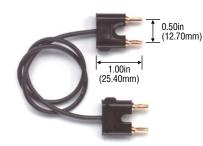
Hook attaches to component leads up to 0.060in (1.52mm) O.D.

Cable: 20 AWG Wire, 0.087in (2.21mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 300V. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +216°F (+102°C) max.

\*Std. Colors: Available in 10 colors.

#### **Miniature Double Banana Plug Cable**



| Model#    | Length      |
|-----------|-------------|
| 2247-K-24 | 24in (0.6m) |

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds (12.70mm) 8A maximum. Maximum voltage for hands free use: 1000 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage. +131°F (+55°C) max.

> Cable Type: RG174/U, 0.100in (2.54mm) O.D.

#### Minigrabber® Test **Clip Patch Cord Kit**

#### Model# 5523

Kit contains 10 pcs. of Model 3781-24, one of each color.

#### **One End Only**

| Model#    | Length      |
|-----------|-------------|
| 3780-60-* | 60in (1.5m) |

\*Std. Colors: -0 Black, -2 Red.

#### **Double Banana Plug to** Alligator Test Clips



| Model#    | Length      |
|-----------|-------------|
| 2BA-AL-36 | 36in (0.9m) |
| 2BA-AL-48 | 48in (1.2m) |

Cable Type: Two cond. Twisted

| Model#    | Length      |
|-----------|-------------|
| 2BC-AL-36 | 36in (0.9m) |
| 2BC-AL-60 | 60in (1.5m) |

Cable Type: RG58C/U50.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 150 Vrms. Do. not use on circuits where transient stresses can exceed the rated voltage. +122°F (+50°C) max.

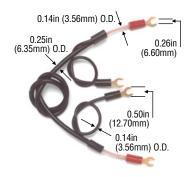
Jaw Opening: 0.30in (7.62mm)

### **Patch Cords and Test Leads**

#### **Low Thermal EMF Patch Cords**

Special alloy plating and construction preserve the accuracy of microvolt and nanovolt measurement equipment. Designed to greatly minimize the effect of Thermal Electric Voltage (Thermal EMF). Thermal EMF is generated at the junction of dissimilar metals at different temperatures and is common source of error in micro- and nano- volt measurements.

#### **Shielded Low Thermal EMF Spade Lug Patch** Cord



| Model#  | Length      |
|---------|-------------|
| 1756-24 | 24in (0.6m) |
| 1756-48 | 48in (1.2m) |

Cable: 12 AWG Wire, Shield Leads: 18 AWG.

Material: Spade Lug: gold-plated Electrolytic Tough Pitch (ETP) 110 Copper Alloy, 1/2 hard.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 2000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 20A, 131+°F (+55°C) max.

#### **Low Thermal EMF Retractable Sheath Banana Plug to Spade Lug**



| Modle#    | Length      |
|-----------|-------------|
| 5295-36-* | 36in (0.9m) |

Cable: 12 AWG Wire, 0.144in (3.56mm) O.D.

Material: Spade Lug: gold-plated Electrolytic Tough Pitch (ETP) 110 Copper Alloy, 1/2 hard; Plug End: gold-plated tellurium copper.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1000V. Do not use on circuits where transient stresses can exceed the rated voltage. 7A, +131°F (+55°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Low Thermal EMF Spade Lug Patch Cord**



| Model#    | Length      |
|-----------|-------------|
| 1693-36-* | 36in (0.9m) |
| 1693-60-* | 60in (1.5m) |

Cable: 12 AWG Wire, 0.144in (3.56mm) O.D.

Material: Spade Lug: gold-plated Electrolytic Tough Pitch (ETP) 110 Copper Alloy, 1/2 hard.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum, Maximum voltage for hands free use: 2000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 20A, +131°F (+55°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Low Thermal EMF Retractable Sheath Banana Plug Patch** Cord



| Model#     | Length      |
|------------|-------------|
| 5291A-24-* | 12in (0.3m) |
| 5291A-36-* | 36in (0.9m) |
| 5291A-60-* | 60in (1.5m) |

Cable: 12 AWG Wire, 0.144in (3.56mm) O.D.

Material: Plug Body: gold-plated tellurium copper; Spring: gold-plated Beryllium Copper.

Rating: 1000V per IEC61010-031, 7A, +131°F (+55°C).

\*Std. Colors: -0 Black, -2 Red.



#### SMD Grabber® Test **Clip Patch Cord**



| Model#    | Length      |
|-----------|-------------|
| 5301-12-* | 12in (0.3m) |
| 5301-24-* | 24in (0.6m) |

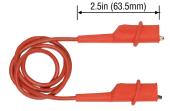
Pincer Opening: 0.04in (1.63mm).

Cable: 22 AWG Wire, 0.064in (1.60mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 150V. Do not use on circuits. where transient stresses can exceed the rated voltage. 0.5A, +216°F (+102°C) max.

\*Std. Colors: -0 Black, -2 Red

#### 1000V Alligator **Patch Cord**



| Model#    | Length      |
|-----------|-------------|
| 6576-24-* | 24in (0.6m) |
| 6576-36-* | 36in (0.9m) |

Jaw Opening: 0.300in (7.62mm).

Material: Body: nickel-plated steel; Boot:

santoprene rubber.

Cable: 18 AWG Wire, silicone insulated.

Rating: Maximum voltage for hands free use: 1000V. 10A, -13 to 176°F (-25°C to 80°C).

\*Std. Colors: -0 Black, -2 Red.



#### SMD Grabber® Test Clip Patch Cord Kit

Kit contains 10 pcs. of Model 5301-24, one each of ten colors.

Model# 5521

#### **Multi-Stacking Banana Plug to Alligator Test Clip**



| Model#    | Length      |
|-----------|-------------|
| 1166-12-* | 12in (0.3m) |
| 1166-24-* | 24in (0.6m) |
| 1166-36-* | 36in (0.9m) |
| 1166-48-* | 48in (1.2m) |
| 1166-60-* | 60in (1.5m) |

Jaw Opening: 0.300in (7.62mm).

Cable: 18 AWG Wire, 0.144in (3.56mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 150V. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### MicroGrabber® Test **Clip Patch Cord**



| Model#    | Length      |
|-----------|-------------|
| 4613-12-* | 12in (0.3m) |
| 4613-24-* | 24in (0.6m) |
| 4613-36-* | 36in (0.9m) |
| 4613-48-* | 48in (1.2m) |

Hook attaches to components up to 0.040in (1.02mm) O.D.

20 AWG Wire, 0.087in (2.21mm) O.D.

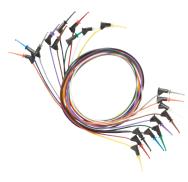
Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 150V. Do not use on circuits where transient stresses can exceed the rated voltage. 3A, +216°F (+102°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Banana Plug to Alligator Clip Patch Cord Kit**

| Model#  | Length      |
|---------|-------------|
| 6357-36 | 36in (0.9m) |

Kit contains 10 pcs. of Model 1166 patch cords, one each of 10 colors.



#### MicroGrabber® **Test Clip Patch Cord Kit**

Kit contains 10 pcs. of Model 4613-24, one each of ten colors.

Model# 5525



### **Patch Cords and Test Leads**

#### **Minigator Test Clip** Patch Cord



| Model#    | Length      |
|-----------|-------------|
| MG-B-12-* | 12in (0.3m) |
| MG-B-24-* | 24in (0.6m) |

Jaw Opening: 0.187in (4.75mm).

Cable: 18 AWG Wire, 0.144in (3.56mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 45V. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Multi-Stacking Banana Plug to Minigator Test Clip**



| Model#    | Length      |
|-----------|-------------|
| 3220-12-* | 12in (0.3m) |
| 3220-24-* | 24in (0.6m) |
| 3220-36-* | 36in (0.9m) |
| 3220-48-* | 48in (1.2m) |

Jaw Opening: 0.187in (4.75mm).

Cable: 20 AWG Wire, 0.087in (2.21mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/ 60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 45V. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

\*Std. Colors: -0 Black. -2 Red.

#### **Alligator Test Clip Patch Cord**



| Model#    | Length      |
|-----------|-------------|
| AL-B-12-* | 12in (0.3m) |
| AL-B-24-* | 24in (0.6m) |
| AL-B-36-* | 36in (0.9m) |
| AL-B-48-* | 48in (1.2m) |
| AL-B-60-* | 60in (1.5m) |

Jaw Opening: 0.300in (7.62mm).

Cable: 18 AWG Wire, 0.144in (3.56mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 150V. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Retractable Sheath Banana Plug Patch** Cord



| Model#     | Length      |
|------------|-------------|
| 4911A-12-* | 12in (0.3m) |
| 4911A-24-* | 24in (0.6m) |
| 4911A-36-* | 36in (0.9m) |
| 4911A-48-* | 48in (1.2m) |
| 4911A-60-* | 60in (1.5m) |

Cable: 18 AWG Wire, 0.144in

(3.56mm) O.D.

Rating: 1000V per IEC61010-031, 10A,

+176°F (+80°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Alligator Test** Clip Patch **Cord Kit**

| Model#  | Length      |
|---------|-------------|
| 6356-12 | 12in (0.3m) |
| 6356-24 | 24in (0.6m) |
| 6356-36 | 36in (0.9m) |

Kit contains 10pcs, of Model AL-B patch cords, one each of 10 colors.

#### Minigrabber® Test Clip to Straight Banana **Plug Patch Cord**



| Model#    | Length      |
|-----------|-------------|
| 4650-24-* | 24in (0.6m) |
| 4650-36-* | 36in (0.9m) |

Hook attaches to component leads up to 0.060in (1.52mm) O.D.

Cable: 20 AWG Wire, 0.087in (2.21mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 300V. Do not use on circuits where transient stresses can exceed the rated voltage.5A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### 5 Way Alligator to **Sheathed Right Angle Set**



| Model#     | Length       |  |  |  |
|------------|--------------|--|--|--|
| 6483-48-02 | 48in (1.2mm) |  |  |  |

Clip includes bed of nails and single needle tip for easy, versatile piercing of wire insulation to contact inner conductor for measurement.

Pierces 19 to 26 AWG wire.

Std. Colors: -0 Black. -2 Red. -02 Set of one black and one red.



#### 0.025in (0.64mm) Square Pin Jack to Straight Banana Plug



| Model#    | Length      |  |  |  |
|-----------|-------------|--|--|--|
| 4771-24-* | 24in (0.6m) |  |  |  |
| 4771-36-* | 36in (0.9m) |  |  |  |

Cable: 22 AWG Wire, 0.064in (1.63mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 30 Vrms/42.4 Vpk/ 60 Vdc or current exceeds 8A maximum Do not use on circuits where transient stresses can exceed the rated voltage. 3A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Banana Plug to** Banana Jack



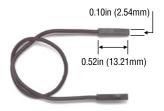
| 2.5       | Length      |  |  |  |
|-----------|-------------|--|--|--|
| 4702-24-* | 24in (0.6m) |  |  |  |
| 4702-36-* | 36in (0.9m) |  |  |  |
| 4702-48-* | 48in (1.2m) |  |  |  |

Cable: 18 AWG Wire, 0.144in (3.56mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 5000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 15A, +131°F (+55°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### 0.025in (0.64mm) Square Pin Jack **Patch Cord**



| Model#    | Length      |  |  |  |
|-----------|-------------|--|--|--|
| 4741-6-*  | 6in (0.15m) |  |  |  |
| 4741-12-* | 12in (0.3m) |  |  |  |
| 4741-24-* | 24in (0.6m) |  |  |  |

Cable: 22 AWG Wire, 0.064in (1.63mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 45 Vac/60 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 3A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### 0.025in (0.64mm) **Square Pin Jack**

**Patch Cord Kit** 

#### Model# 5948

Kit contains 10 pcs. of Model 4741-6, one ea. of 10 colors.

#### Miniature Stacking **Banana Plug Patch Cord**



| Model#    | Length      |  |  |  |
|-----------|-------------|--|--|--|
| 1081-4-*  | 4in (0.1m)  |  |  |  |
| 1081-8-*  | 8in (0.2m)  |  |  |  |
| 1081-12-* | 12in (0.3m) |  |  |  |
| 1081-18-* | 18in (0.5m) |  |  |  |
| 1081-24-* | 24in (0.6m) |  |  |  |
| 1081-36-* | 36in (0.9m) |  |  |  |
| 1081-48-* | 48in (1.2m) |  |  |  |
| 1081-60-* | 60in (1.5m) |  |  |  |

Cable: 20 AWG Wire, 0.087in (2.21mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 3000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +131°F (+55°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Stacking Pin Tip Plug Patch Cord**



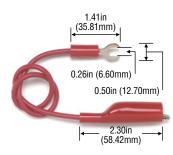
| Model# | Length      |  |  |  |  |
|--------|-------------|--|--|--|--|
| P-4-*  | 4in (0.1m)  |  |  |  |  |
| P-8-*  | 8in (0.2m)  |  |  |  |  |
| P-12-* | 12in (0.3m) |  |  |  |  |
| P-18-* | 18in (0.5m) |  |  |  |  |
| P-24-* | 24in (0.6m) |  |  |  |  |
| P-36-* | 36in (0.9m) |  |  |  |  |

Cable: 20 AWG Wire, 0.087in (2.21mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 3000 Vdc. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +131°F (+55°C) max.

\*Std. Colors: -0 Black, -2 Red.

#### **Alligator Test Clip to Insulated Spade Lug**



| Model#    | Length      |
|-----------|-------------|
| 1960-36-* | 36in (0.9m) |

Jaw Opening: 0.30in (7.62mm). Cable: 18 AWG Wire, 0.144in

(3.56mm) O.D.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/ 60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use:

150V. Do not use on circuits where transient stresses can exceed the rated voltage. 5A, +122°F (+50°C) max.

\*Std. Colors: -0 Black, -2 Red.



# Calibration Kits

Pomona has made it easy for you to have exactly what you need with a huge selection of patch cords and test leads designed for reliable, convenient connections. Whether you need a test lead that can access an IC pin without shorting or a patch cord that accommodates multiple stacking, Pomona Electronics' design and reliability are your connection with quality.

#### **Calibration Accessory Kit**

#### Model# CK73041

The Pomona CK73041 Calibration Kit includes the major connectors and test cables you need for instrument calibration in a comprehensive kit. Versatile adapters and flexible cables greatly expand the variety of test cables you can create, reducing the number of special-purpose patch cords and connectors needed for calibration applications.

#### Perfect for:

- Field Calibration
- Outfitting a new technician or lab
- Comprehensive replacement of important connectors and leads

#### The Calibration Kit allows you to:

- Combine connectors with patch cords to create a wide variety of necessary test cables.
- Reduce the number of test cables needed by creating multiple combinations.
- Make low voltage precision measurements with shielded low thermal EMF spade lug patch cords.
- Easily connect to a variety of test equipment with BNC to banana and BNC to binding post adapters.
- Use shielded coax cables for test and calibration rather than unshielded leads.
- Turn banana plug patch cords into test leads terminated with alligator clips, spade lugs,



54





From setting up system electronics to circuitry prototyping, Pomona provides you with the boxes and enclosures to securely seal signal sensitive cables and wires. The large variety of die-cast aluminum connectorized enclosures and phenolic or molded thermoplastic boxes are ready to house components in styles and sizes that will simplify your interconnections.

#### Miniature Size Die Cast Aluminum Box with Cover

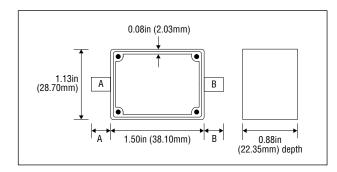




|       |          | Co                    | nnector: A           | Connector: B  |                  |  |  |  |
|-------|----------|-----------------------|----------------------|---------------|------------------|--|--|--|
| Model | # Finish | Туре                  | Length               | Туре          | Length           |  |  |  |
| 3754  | None     | -                     |                      |               | -                |  |  |  |
| 3753  | BBE      | -                     | _                    | -             | -                |  |  |  |
| 3751  | BBE      | BNC (F)               | 0.72in (18.29mm)     | BNC (F)       | 0.72in (18.29mm) |  |  |  |
| 3752  | BBE      | BNC (F)               | 0.72in (18.29mm)     | BNC (M)       | 0.85in (21.59mm) |  |  |  |
| 4742  |          | Replacement cover     |                      |               |                  |  |  |  |
| 4864  |          | Cover screws, 100/pkg |                      |               |                  |  |  |  |
| 2352  |          | Conne                 | ctor screws with sol | der turret,10 | 0/pkg            |  |  |  |

BBE = Blue Baked Enamel

Cover and screws included with all boxes.



# "A" Size Die Cast Aluminum Box with Cover



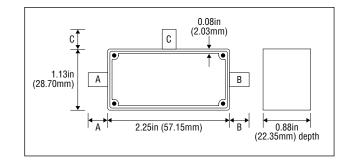
| 2391   | 2392  |
|--|---|
|  |   |
| 2401   | 2393  |
| and the second s | CONTRACTOR OF THE PARTY OF THE |
| 2399   | 2398  |

|   |        |                       | Connector: A |                  | Connector: B |                      | Connector: C |                  |
|---|--------|-----------------------|--------------|------------------|--------------|----------------------|--------------|------------------|
| I | Model# | Finish                | Туре         | Length           | Туре         | Length               | Туре         | Length           |
| 2 | 2400   | None                  | _            | -                | _            | ı                    | -            | _                |
| 2 | 2397   | BBE                   | _            | -                | -            | -                    | -            | _                |
| 2 | 2390   | BBE                   | BNC (F)      | 0.72in (18.29mm) | BNC (F)      | 0.72in (18.29mm)     | ı            | -                |
| 2 | 2391   | BBE                   | BNC (M)      | 0.85in (21.59mm) | BNC (F)      | 0.72in (18.29mm)     | -            | _                |
| 2 | 2392   | BBE                   | BNC (F)      | 0.72in (18.29mm) | BNC (F)      | 0.72in (18.29mm)     | BNC (F)      | 0.72in (18.29mm) |
| 2 | 2401   | BBE                   | BNC (F)      | 0.72in (18.29mm) | BNC (F)      | 0.72in (18.29mm)     | BNC (M)      | 0.85in (21.59mm) |
| 2 | 2393   | BBE                   | BNC (F)      | 0.72in (18.29mm) | BNC (M)      | 0.85in (21.59mm)     | PDB          | 0.82in (20.83mm) |
| 2 | 2398   | BBE                   | SMA (F)      | 0.38in (9.69mm)  | SMA (M)      | 0.38in (9.69mm)      | -            | -                |
| 2 | 2399   | BBE                   | SMA (F)      | 0.38in (9.69mm)  | SMA (F)      | 0.38in (9.69mm)      | -            | -                |
| 4 | 1245   | Replacement cover     |              |                  |              |                      |              |                  |
| 3 | 3728   | Flange mounting cover |              |                  |              |                      |              |                  |
| 4 | 1864   | Cover screws, 100/pkg |              |                  |              |                      |              |                  |
| 2 | 2352   |                       |              | Conne            | ctor screw   | s with solder turret |              |                  |

BBE = Blue Baked Enamel

PDB = Post, Double Binding

Cover and screws included with all boxes.





# **Boxes and Enclosures**

#### "B" Size Die Cast **Aluminum Box with** Cover



2417/2428



|        |                                     | C       | onnector: A      | C       | onnector: B      | Connector: C |                  | Connector: D |                  |
|--------|-------------------------------------|---------|------------------|---------|------------------|--------------|------------------|--------------|------------------|
| Model# | Finish                              | Туре    | Length           | Туре    | Length           | Туре         | Length           | Туре         | Length           |
| 2428   | None                                | _       | ı                | -       | _                | _            | -                | _            | _                |
| 2417   | BBE                                 | -       | -                | -       | -                | -            | -                | -            | -                |
| 3230   | BBE                                 | BNC (F) | 0.72in (18.29mm) | BNC (F) | 0.72in (18.29mm) | -            | -                | -            | -                |
| 3231   | BBE                                 | BNC (F) | 0.72in (18.29mm) | BNC (M) | 0.85in (21.59mm) | -            | ı                | _            | _                |
| 3239   | BBE                                 | IBNC    | 0.47in (11.94mm) | IBNC    | 0.47in (11.94mm) | -            | -                | _            | _                |
| 3232   | BBE                                 | BNC (F) | 0.72in (18.29mm) | BNC (F) | 0.72in (18.29mm) | BNC (F)      | 0.72in (18.29mm) | _            | _                |
| 3234   | BBE                                 | BNC (F) | 0.72in (18.29mm) | BNC (F) | 0.72in (18.29mm) | BNC (F)      | 0.72in (18.29mm) | BNC (F)      | 0.72in (18.29mm) |
| 4246   |                                     |         |                  |         | Replacement      | cover        |                  |              |                  |
| 3719   | Flange mounting cover               |         |                  |         |                  |              |                  |              |                  |
| 4864   | Cover screws, 100/pkg               |         |                  |         |                  |              |                  |              |                  |
| 2352   | Connector screws with solder turret |         |                  |         |                  |              |                  |              |                  |

BBE = Blue Baked Enamel

IBNC = Isolated BNC

Cover and screws included with all boxes.



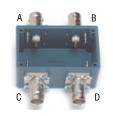


3231

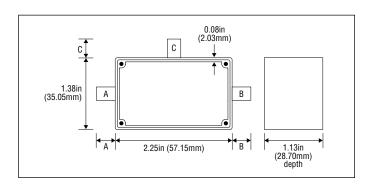




3239



3234



#### "C" Size Die Cast Aluminum Box with Cover



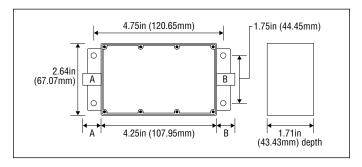
2901 / 2906



2902

|        |                   |                        | Connector: A         |            | Connector: B   |  |  |  |
|--------|-------------------|------------------------|----------------------|------------|----------------|--|--|--|
| Model# | Finish            | Type                   | Length               | Туре       | Length         |  |  |  |
| 2906   | None              | -                      | _                    | -          | -              |  |  |  |
| 2901   | BBE               | 1                      |                      |            | -              |  |  |  |
| 2902   | BBE               | BNC (F) 0.72 (18.29mm) |                      | BNC (F)    | 0.72 (18.29mm) |  |  |  |
| 4248   | Replacement cover |                        |                      |            |                |  |  |  |
| 2352   |                   |                        | Connector screws wit | h solder t | urret          |  |  |  |

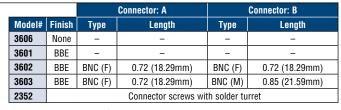
BBE = Blue Baked Enamel Cover and screws included with all boxes.



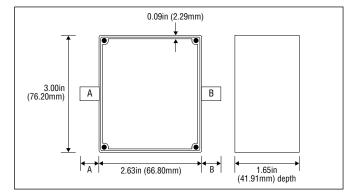


#### "D" Size Die Cast Aluminum Box with Cover





BBE = Blue Baked Enamel Cover and screws included with all boxes.



3603 3602



3601/3606

#### "E" Size Die Cast **Aluminum Box** with Cover



|      | - |
|------|---|
| 4226 |   |

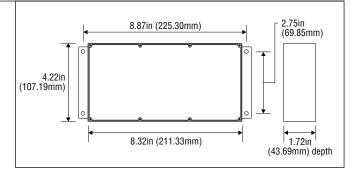
| Model# | Finish            |
|--------|-------------------|
| 5186   | None              |
| 4226   | Blue Baked Enamel |

Cover and screws included.

8.00in x 1.49in x .062in,

#### **Recommended Circuit Board Sizes:**

(203.2mm x 37.85 x 1.57mm) Thick. 3.90in x 1.49in x .062in, (99.06mm x 37.85 x 1.57mm) Thick. 7.60in x 3.40in x .062in, (193.04mm x 86.36mm x 1.57mm) Thick.



### **Boxes and Enclosures**

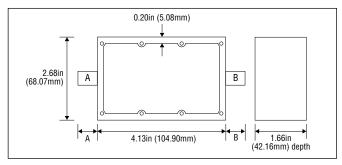
# "F" Size Extruded Aluminum Box with Covers





|        |                       |                                     | Connector: A     |         | Connector: B     |
|--------|-----------------------|-------------------------------------|------------------|---------|------------------|
| Model# | Finish                | Туре                                | Length           | Туре    | Length           |
| 3306   | None                  | -                                   | -                | -       | -                |
| 3301   | BBE                   | -                                   | -                | -       | -                |
| 3302   | BBE                   | BNC (F)                             | 0.72in (18.29mm) | BNC (F) | 0.72in (18.29mm) |
| 4247   |                       | Replacement cover                   |                  |         |                  |
| 4862   | Cover screws, 100/pkg |                                     |                  |         |                  |
| 2352   |                       | Connector screws with solder turret |                  |         |                  |

BBE = Blue Baked Enamel Cover and screws included with all boxes.



#### **Recommended Circuit Board Sizes:**

3.90in x 1.48in x 0.062in, (99.06mm x 37.59 x 1.57mm) Thick. 2.40in x 1.48in x 0.062in, (60.96mm x 37.59mm x 1.57mm) Thick.

#### "G" Size Extruded Aluminum Box with Cover

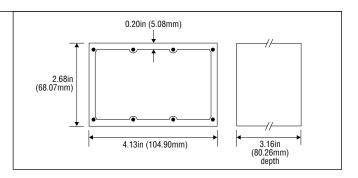


| Model# | Finish                |  |
|--------|-----------------------|--|
| 3316   | None                  |  |
| 3311   | Blue Baked Enamel     |  |
| 4247   | Replacement cover     |  |
| 4862   | Cover screws, 100/pkg |  |
|        |                       |  |

Cover and screws included.

#### **Recommended Circuit Board Sizes:**

3.90in x 2.98in x .062in, (99.06mm x 75.69mm x 1.57mm) Thick. 2.40in x 2.98in x .062in, (60.96mm x 75.69mm x 1.57mm) Thick.



"H" Size Extruded Aluminum Box with Cover

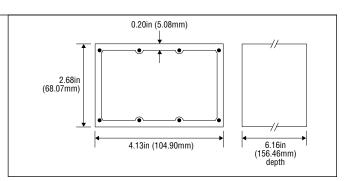


| Model#           | Finish                |  |
|------------------|-----------------------|--|
| <b>3743</b> None |                       |  |
| 3742             | Blue Baked Enamel     |  |
| 4247             | Replacement cover     |  |
| 4862             | Cover screws, 100/pkg |  |

Cover and screws included.

#### **Recommended Circuit Board Sizes:**

3.90in x 5.98in x .062in, (99.06mm x 75.69mm x 1.57mm) Thick. 2.40in x 5.98in x 0.062in, (60.96mm x 75.69mm x 1.57mm) Thick.



3742



# "J" Size Die Cast Aluminum Box with Cover

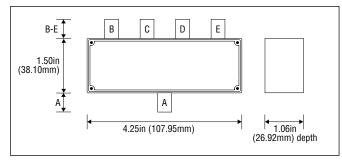


4655/5255



|        | Connector: A |                       | Connector: B to E |         |                |
|--------|--------------|-----------------------|-------------------|---------|----------------|
| Model# | Finish       | Туре                  | Length            | Туре    | Length         |
| 5255   | None         | -                     | -                 | -       | ı              |
| 4655   | BBE          | -                     | -                 | -       | -              |
| 4656   | BBE          | BNC (F)               | 0.72 (18.29mm)    | BNC (F) | 0.72 (18.29mm) |
| 4864   |              | Cover screws, 100/pkg |                   |         |                |

BBE = Blue Baked Enamel Cover and screws included with all boxes.



#### **Recommended Circuit Board Sizes:**

 $\begin{array}{lll} 4.13 \text{in} \times 0.87 \text{in} \times 0.062 \text{in}, & 1.38 \text{in} \times 0.87 \text{in} \times .062 \text{in}, \\ (104.9 \text{mm} \times 22.10 \text{mm} \times 1.57 \text{mm}) \text{ Thick.} & (35.05 \text{mm} \times 22.10 \text{mm} \times 1.57 \text{mm}) \text{ Thick.} \end{array}$ 

#### "L" Size Die Cast Aluminum Box with Cover



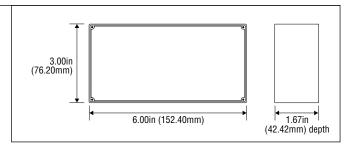
| 49 | 0  | 3 |
|----|----|---|
|    | JU | 3 |

| Model# | Finish                |  |
|--------|-----------------------|--|
| 5203   | None                  |  |
| 4903   | Blue Baked Enamel     |  |
| 4864   | Cover screws, 100/pkg |  |

Cover and screws included.

#### **Recommended Circuit Board Sizes:**

5.88in x 1.48in x .062in, (149.35mm x 37.59mm x 1.57mm) Thick. 2.88in x 1.48in x .062in, (73.15mm x 37.59mm x 1.57mm) Thick.



#### Molded Thermoplastic Box with Card Guides and Cover



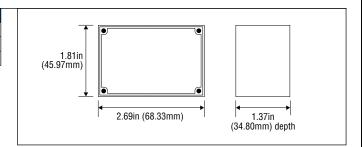
3850-0

| Model# | Finish                |
|--------|-----------------------|
| 3850-0 | Black - Thermoplastic |
| 3850-6 | Blue - Thermoplastic  |
| 4864   | Cover screws 100/pkg  |

Cover and screws included.

#### **Recommended Circuit Board Sizes:**

 $\begin{array}{l} 2.51 in \ x \ 1.60 in \ x \ .062 in, \\ (63.35 mm \ x \ 40.64 mm \ x \ 1.57 mm) \ Thick. \end{array}$ 





Connecting with the industry's leading digital multimeter brands, Pomona provides the world's largest selection of test leads and probes. Superior materials and outstanding design, assure conformity with industry-leading reliablility and performance standards. From high-density IC leads to voltage on a distribution panel, Pomona connects you with the right solution.

#### **Deluxe Multi-Use DMM Maxi-Kit**



#### Model# 5677B

- 1. Silicone insulated 4ft (1.2m) leads with right angle plug.
- 2. Modular probe set with replaceable tips.
- 3. 5 sets of replacement tips.
- 4. Retractable tip test probe set.
- 5. Test lead coupler set.
- 6. Medium alligator clip set.
- 7. Large alligator clip set.
- 8. Spade lugs.
- 9. IC probe tip adapter.
- 10. Minigrabber® test clip leads.
- 11. Minipincer® test clip leads.
- 12. Nylon storage pouch.
- · Modular probes with interchangeable tips.
- Silicone insulated 4ft (1.2m) test leads with right-angle DMM plugs for most meters from Fluke, HP, Meterman, Amprobe, and others.
- New retractable tip probe with 3in (76.2mm) long tip and silicone leads.
- Minigrabber® and Minipincer® test clip leads attach to test leads.
- Test lead coupler connects leads to probe set for 16ft (4.8m) reach.
- Nylon storage pouch with compartments for accessories.

#### **Electronic DMM Maxi-Kit**



#### Model# 6340

- 1. Silicone insulated 4ft (1.2m) leads.
- 2. Modular probe set.
- Precision electronic probes.
- 4. 4 sets of replacements tips.
- 5. Test lead couplers.
- 6. Medium alligator clips.
- 7. Large alligator clips.
- 8. Minigrabber® test clip leads.
- 9. Minipincer® test clip leads.
   10. Spade lugs.
- 11. Nylon storage pouch.
- , , ,
- Modular probes with caged-spring tips fit 4mm sockets.

  Oil and the state of t
- Silicone insulated 4ft (1.2m) test leads with right-angle DMM plugs fit most meters from Fluke, HP, Meterman, Amprobe, Greenlee and others.
- Precision Electronic probe with replacement tips offers flexibility in testing.
- Minigrabber® and Minipincer® test clip leads for smaller test points.
- Nylon storage pouch with compartments for accessories.



#### **Deluxe Electronic DMM Test Lead Kit**



#### Model# 5674C

- 1. Silicone insulated 4 ft (1.2m) leads with right-angle plug.
- 2. Modular probe set with standard tips.
- Extended probe tip adapters.
   Medium alligator clips.
- 5. IC probe tip adapters.
- 6. Minigrabber® test clip leads.
- Minipincer® test clip leads.
- 8. Maxigrabber® test clips with pincer tip.
- 9. Nylon storage pouch.
- · Modular probes with standard probe tips
- Insulated 4ft (1.2m) test leads with right-angle DMM plugs fit most meters from Fluke, HP, Meterman, and others.
- Probe tip extender with 3in (76.2mm) long tip.
- Minigrabber® test clip leads attach to test leads.
- Minipincer® test clip leads for fine pitch chip leads
- Maxigrabber® test clips attach to test leads.
- Nylon storage pouch with compartments for accessories.

#### **Electronic DMM Test Lead Kit**



#### Model# 5543B

- 1. Silicone insulated 4ft (1.2m) test. leads with right-angle DMM plugs.
- 2. Modular electronic test probes with standard tips.
- 3. Extended fine-tip probe adapter -red.
- Medium alligator clip -black.
- 5. IC probe tip adapter -red.
- Insulated spade lug -black.
- Minipincer® test clip lead -red. 8. Minigrabber® test clip lead -red.
- 9. Nylon storage pouch.
- Silicone insulated 4ft (1.2m) test leads fit meters from Fluke, HP, Meterman,
- Modular electronic test probes attach
- Extended fine-point adapter attaches to probe tips.
- IC adapter attaches to probe for secure probing on chip leads.
- Minipincer® test clip lead for fine pitch chip leads.
- Minigrabber® test clip lead extend the reach of the test leads.

# **Basic Electronic DMM Test Lead Kits**



| Model#  | Plug Type             | Ratings   |  |
|---|-----------------------|---|--|
| 6343  | Right-angle DMM plugs | IEC61010, CAT III 1000V<br>CAT II 1000V without<br>protective cap |  |
| 5672A Right-angle banana plug 6344 Straight DMM plugs |                       | 30 Vrms/42.4 Vpk/60 Vdc   |  |
|   |                       | IEC61010, CAT III 1000V<br>CAT II 1000V without<br>protective cap |  |
| 5325A   | Stacking banana plugs | 30 Vrms/42.4 Vpk/60 Vdc   |  |

- 1. Comfort-grip DMM test probes.
- 2. Silicone insulated 4ft (1.2m) leads.
- 3. Extended probe tip adapters.
- 4. Alligator clip probe tip adapters. 5. Plastic storage case (not shown).

Note: Model 5672A has HEAVY-DUTY stainless-steel tips.

See page 67 for banana plug types.

- · Featuring Pomona's new comfort-grip probes.
- Monolithic probes with fixed tips.
- DMM plugs fit most meters from Fluke, Meterman, HP, Amprobe, Greenlee, and others.
- Extended tip adapter has sharp needle point.
- Alligator clip adapter snaps onto the probe tip.

#### **Deluxe Electronic Bench DMM Test Lead Kit**



#### Model# 6204A

- 1. Silicone insulated 4ft (1.2m) test leads with straight DMM plugs.
- Modular electronic test probes with standard tips.
- Extended fine-tip probe adapters.
- Medium alligator clips.
- IC lead probe tip adapters
- Insulated spade lugs.
- Minipincer® test clip leads.
- Minigrabber® test clip leads. 9. Nylon storage pouch.
- fit meters from Fluke, HP (Agilent), Keithley and others.
- Modular electronic test probes attach to leads.

Silicone insulated 4ft (1.2m) leads

- Extended fine-point adapters attach to probe tips.
- IC adapters attach to probes for secure probing on chip leads.
- Minipincer® test clip leads for fine pitch chip leads.
- Minigrabber® test clip leads extend the reach of the test leads.

#### **Electronic Bench DMM Test Lead Kit**



#### Model# 5901B

- 1. Silicone insulated 4ft (1.2m) test leads with straight DMM plugs.
- 2. Modular electronic test probes with replaceable tips.
- 5 sets of replacement probe tips
- Medium alligator clips. Insulated spade lugs.
- 6. Minigrabber® test clip leads.
- 7. Nylon storage pouch.
- DMM plugs fit meters from Fluke, HP (Agilent), Keithley and others.
- Modular electronic test probes with replaceable tips adapt to many different modes.
- Replacement probe tips offer a wide variety of probing solutions.
- Alligator clips attach to test lead for reliable connections. Spade lugs attach to test leads for
- binding posts or terminal screws.
- Minigrabber® test clip leads extend the reach of the test leads.
- Uses 080 replaceable probe tips.
- Rated CAT II 600V 10A.

#### **Deluxe Automotive DMM Test Lead Kit**



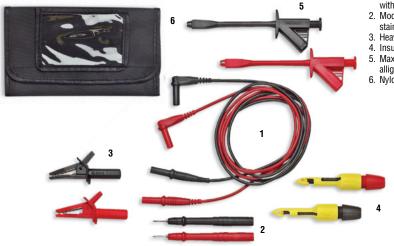
#### Mode# 6530A

- 1. Silicone insulated 4ft (1.2m) test leads Alligator clips attach to test lead for with right-angle DMM plugs.
- 2. Heavy-duty modular test probes with stainless-steel tips.
- 3. Heavy-duty alligator clips. 4. Insulation piercing clips.
- Maxigrabber® test clips with alligator jaws.
- Maxigrabber® test clips with hook.
- 7. Backprobe pins.
- 8. Nylon storage pouch.

- reliable connections.
- Sharp stainless-steel probe tips resist wear.
- Insulation piercing clips make connections without stripping insulation from wires.
- Backprobe pins access contacts through the back side of automotive connectors.
- DMM plugs fit meters from Fluke, Meterman, Amprobe, Greenlee and
- Maxigrabber® test clips with alligator jaws for quick and easy connections.



#### Industrial/Automotive DMM Test Lead Kit



#### Model# 5903A

- 1. Silicone insulated 4ft (1.2m) test leads with right-angle DMM plugs.
- 2. Modular electrical test probes with stainless steel tips.
- 3. Heavy-duty alligator clips.4. Insulation piercing clips.
- Maxigrabber® test clips with alligator jaws.
- 6. Nylon storage pouch.
- DMM plugs fit meters from Fluke, Meterman, Amprobe, Greenlee and others.
- Sharp stainless-steel probe tips resist wear.
- Alligator clips attach to test lead for reliable connections.
- Insulation piercing clips make connections without stripping insulation from
- Maxigrabber® test clips with alligator jaws for quick and easy connections.

#### **Deluxe Electrical DMM Test Lead Kit**



| Model# | Plug Type            | Ratings   |
|--------|----------------------|---|
| 5904A  | Right-angle DMM plug | CAT III 1000V per IEC61010-031<br>CAT II 1000V without protective cap |

- 1. Silicone insulated 4ft (1.2m) test leads.
- 2. Modular electrical test probes with stainless-steel tips.

  3. Maxigrabber® test clips with jaws.

  4. Maxigrabber® test clips with hooks.
- 5. Maxigrabber® test clips with pincers.
- 6. Large alligator clips.
- 7. Nylon Storage pouch.
- 8. Protective caps

- · DMM plugs fit meters from Fluke, Meterman, Amprobe, Greenlee and others.
- Alligator clips attach to the test leads for secure connections.
- Maxigrabber® test clips attach to test leads.
- Nylon storage pouch to contain all kit components.

#### **Electrical DMM Test Lead Kit**



#### Model# 5673B

- 1. Silicone insulated 4ft (1.2m) test leads with right-angle DMM plugs.
- 2. Modular electrical test probes with stainless-steel tips.
- 3. Extended tip probe adapters.
- 4. Insulated spade lugs.
- 5. Medium alligator clips.
- 6. Large alligator clips.
- 7. Nylon storage pouch.
- DMM plugs fit meters from Fluke, Meterman, Greenlee, Amprobe and others
- Spade lugs connect to test leads and can be secured to binding posts or terminals.
- · Alligator clips plug into the test leads.



#### **Basic Electrical DMM Test Lead Kit**



| Model# | Plug Type            | Ratings   |
|--------|----------------------|---|
| 5900A  | Right-angle DMM plug | CAT III 1000V per IEC61010-031<br>CAT II 1000V without protective cap |

- 1. Silicone insulated 4ft (1.2m) test leads DMM plugs fit meters from Fluke, with right-angle DMM plugs.
- 2. Modular electrical test probes with standard tips.
- Maxigrabber® test clips.
- 4. Nylon storage pouch.
- Metermam, Greenlee, Amprobe and others
- Maxigrabber® test clips with jaws attach to test leads.
- · Nylon carrying pouch included.

#### **Multi-Use DMM Test Lead Kit**



|       | Model# | Ratings   |
|-------|--------|---|
| 5899A |        | CAT III 1000V per IEC61010-031<br>CAT II 1000V without protective cap |

- 1. Silicone insulated 4ft (1.2m) test leads with right-angle DMM plugs.
- Modular electrical test probes with standard tip.
- Maxigrabber® with pincer tips.
- 4. Medium alligator clips.
- Nylon storage pouch.
- DMM plugs fit meters from Fluke, Meterman, Greenlee, Amprobe and others.
- Alligator clips attach to test lead for reliable connections.
- Maxigrabber® test clips with pincers for quick and easy connections.

#### **Deluxe Industrial Test Companion™ Kit**



#### Model# 6173A

Includes shoulder-pack style Cordura carrying case plus the following IEC61010 compliant test accessories:

- 1. Modular Electrical Test Probe Set with Banana Plug Tip.
- 2. Flexible Test Lead Set with Right-Angle and Straight Banana Plugs.
- 3. Probe Lead Set with Sharp Stainless Steel Tip.
- 4. Maxigrabber® Test Clip Set with Pincer Tip.
- 5. Maxigrabber® Test Clip Set with Hook Tip.
- 6. Maxigrabber® Test Clip Set with Jaws.
- 7. Extra Large Alligator Clip Set. 8. Medium Alligator Clip Set.
- 9. Insulated Spade Lug Set.
- 10. Test Companion Carrying Case.



#### Industrial Test Companion™ Kit

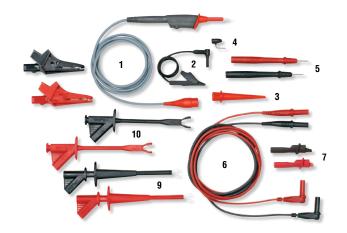


#### Model# 6172A

Includes shoulder-pack style Cordura carrying case plus the following IEC61010 compliant test

- 1. Modular Electrical Test Probe Set with Banana
- Plug Tip. Flexible Test Lead Set with Right-Angle and Straight Banana Plugs.
  Probe Lead Set with Sharp Stainless Steel Tip.
- Maxigrabber® Test Clip Set with Pincer Tip.
- Maxigrabber® Test Clip Set with Hook Tip.
- Medium Alligator Clip Set.
- Insulated Spade Lug Set.

#### **Probe and Lead Kit for Portable Scopes**

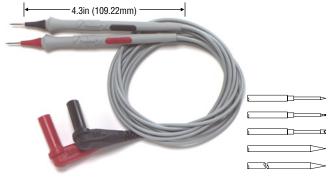


#### Model# 72942

Includes shoulder-pack style Cordura carrying case plus the following test accessories:

- 1. Red Scope Probe, 500 MHz, see page 81.
- 2. Black Ground Lead.
- 3. Red Sprung Hook.
- 4. Probe Tip Ground.
- 5. Modular Test Probe with Standard 0.080in (2mm) Tip.
- 6. Flexible Test Lead Set with Straight and Right-Angle Banana Plugs.
- 7. Medium Alligator Clip Set.
- 8. Extra Large Alligator Clip Set.
- 9. Maxigrabber® Set Pincer Style.
- 10. Maxigrabber® Test Clip Set with Jaws.

#### **Precision Electronic Test Probe Set**



|  | Model#  | Features                                | Ratings       |
|--|---|---|---------------|
|  | Probe set with complete set of 5 tips   |   | CAT II 1000V* |
|  | 6342 Probe set with sharp point gold pogo pin tips 6275 Probe set with sharp stainless steel rigid tips |   | CAT II 1000V  |
|  |   |   | CAT II 1000V  |
|  | 6354  | Replacement probe tips. Set of 5 types. |               |

- Replaceable 0.04in (1.01mm) pogo-pin tips.
- Small outline for tight test situations.
- Replaceable pogo-pin tips.
- Comfort-grip textured surface. Fits all meters including Fluke, HP
- (Agilent), Keithley, Meterman and others.
- Silicone insulated leads resist abrasion and heat.

#### Replacement Tips

- 1. Sharp-point gold pogo-pin.
- 2. Tri-point gold pogo-pin.
- 3. Quad-point gold pogo-pin.
- 4. Sharp stainless steel rigid.
- 5. 3in (76.2mm) long extended. Stainless steel.

 $^{\star}$ except when used with 3in (76.2mm) tip which is 33Vrms/70Vdc.

See page 70 for more probe tips.



#### Safety 2mm/4mm Test Probe Set



| Model# | Ratings  |
|--------|--|
| 6601   | IEC61010 1000V CAT III<br>CAT II 1000V without<br>protective cap |

- Versatile 2mm probe tip with screw-on 4mm tip.
- Each probe includes Protective Cap designed to meet Guidance Note GS38.
- Silicon insulated 4ft (1.2m) test leads with right-angle DMM plugs.
- Comfort-grip textured surface.

# **SMD Micro Tip/Test Probe**



| Model#    | Color                     |  |  |
|-----------|---------------------------|--|--|
| 5144-48-0 | Black                     |  |  |
| 5144-48-2 | Red                       |  |  |
| 6235      | Set of two:<br>Black, Red |  |  |
|           |                           |  |  |

The probe microtip is specially designed to probe SMD contacts. It features a stainless steel needle tip that is flexible to help prevent damage to SMD lands. The tip is curved to aid in probing hard to reach areas.

Ratings: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1200 Vrms Max. Do not use on circuits where transient stresses can exceed the rated voltage.

#### **Retractable Needle Tip Test Probes**

|   | Model# Plug Type |                 | Ratings      |
|---|------------------|-----------------|--------------|
|   | 5953A            | Right-angle DMM | CAT II 600V* |
| ĺ | 5952A            | Stacking banana | 600V**       |
|   |                  |                 | + 15001010   |

\*per IEC61010



- Silicone insulated 4ft (1.2m) leads fits most meters from Fluke, Meterman, HP, Amprobe, Greenlee and others.
- Fully insulated tip extends to 3in (76.2mm).
- Durable 0.040in (1.02mm) stainless-steel
- needle tips reach into inaccessible areas.
- Set of 2 probes, one black and one red.

Ratings: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.2 Vnk /60 Vdc or current exceeds 8A maximum Maximum voltage for hands free use: 600 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage.

#### Maxigrabber® Test Clip Set with Pincer



#### Model# 5910B

Includes set of 2, one red and one black

Pincer Opening: 0.080in (2.03mm) dia. test point.

Rating: Overvoltage CAT III, 1000V, 10A per IEC61010-031.

#### **Test Probes with** Screw-on **Alligator Clips**

See page 67 for banana plug types.



| Model# | Ratings  |  |
|--------|--|--|
| 6723   | IEC61010 1000V CAT III<br>20A (probe alone)                    |  |
|        | IEC61010 1000V CAT II without protective cap                   |  |
|        | IEC61010 300V, CAT II<br>10A (with alligator clip<br>attached) |  |

- Probe set includes 2 screw-on alligator clips.
- 8-32 threaded tips allow secure, attachment of alligator clips.
- Silicon insulated 4ft (1.2m) test leads with right-angle DMM plugs.
- Comfort-grip textured surface.

Model#

6146

Wide temperature range of 14 to 131°F (-10 to +55°C).

Description

Briefcase style with

carrying strap

Medium shoulder-pack with carrying strap

> Folding case with Velcro

#### Maxigrabber® Test Clip Set with Hook



#### Model# 5911B

Includes set of 2, one red and one black.

Hook Fits Test Points to: 0.060in (1.52mm) diameter.

Hook Opens to: 0.25in (6.5mm).

Rating: Overvoltage CAT III, 1000V, 10A per IEC61010-031.

#### Maxigrabber® Test Clip Set with Jaws



#### Model# 5912B

Includes set of 2, one red and one black

Jaw Opening: 0.50in (12.70mm) dia. Rating: Overvoltage CAT III, 1000V, 10A per IEC61010-031.

#### **Pomona's Test Companion™ Accessory** Cases and Pouches



5955

### **Insulation Piercing** Maxigrabber® Test Clip Set



#### Model# 5913

Includes set of 2, one red and one black.

Pierces insulation to make connection on wire up to 0.144in (3.66mm)

Rating: 1000 Vrms max. 10A. Do not use on circuits where transient stresses can exceed the rated voltage.



# TwistGuard™ Test Lead Set



| Model# | Features                     | Plug Type           | Ratings   |
|--------|------------------------------|---------------------|---|
| 7519A  | Retractable probe tip sheath | Right-angle DMM (1) | CAT III 1000V,<br>CAT IV 600V,<br>CAT II 1000V* |

\*per IEC61010-031 CAT II 1000V CAT II with sheath retracted

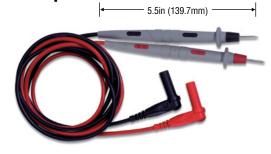
# Twist and Test for Measurement Versatility and Increased Safety

The Pomona Electronics 7519A TwistGuard™ Test Lead Set features an adjustable probe tip shroud for use in different measurement environments. By twisting the test probe, the user can change the exposed probe tip length, reducing the amount of tip exposed and any chance of an arc flash from short circuits.

The patented design offers the versatility and quality needed to instantly change the test leads from a CAT II rated probe to a CAT III/IV rated probe, allowing users to meet the latest electrical safety standards.

- TwistGuard™ feature for changing between 0.75in to 0.16in (19mm to 4mm) probe tip lengths, reducing tip exposure for increased safety.
- · Probes always show correct category rating for the tip exposure used.
- Compatible with all instruments that accept standard 4mm shrouded banana plugs.
- WearGuard™ test lead wire is covered by two layers of silicone insulation, which acts as a
  wear indicator exposing an inner contrasting color when the leads are nicked, scuffed, or
  otherwise damaged and in need of replacement.
- Extra-heavy strain relief on both the probe-end and banana plug-end, tested beyond 30,000 bends without failure.
- Rubber-overmold on the probe and plug provides the user a comfortable hold and steady grip for making accurate measurements.
- CAT III 1000 V/CAT IV 600 V, 10 A max. when probe tip shroud is fully extended.
- CAT II 1000 V when probe tip shroud is retracted.

# Replacement DMM Test Lead Sets with Fixed Tips



| Model# Features |   | Plug Type              | Ratings          |  |
|-----------------|---|------------------------|------------------|--|
| 5519A           | Standard tip Nickel/brass               | Right-angle DMM (1)    | CAT III 1000V*   |  |
| 6365            | 6365 Standard tip Nickel/brass Straight |                        | CAT III 1000V*   |  |
| 6366            | Standard tip Nickel/brass               | Retractable sleeve (5) | CAT III 1000V*   |  |
| 5898            | Stainless steel heavy-duty tip          | Right-angle DMM (1)    | CAT III 1000V*   |  |
| 5309A           | Stainless steel heavy-duty tip          | Stacking banana (3)    | 30 Vrms/60 Vdc** |  |

\*per IEC61010-031 CAT II 1000V without protective caps

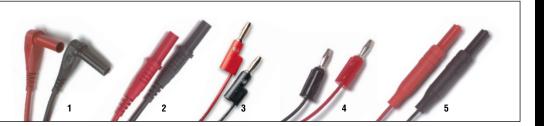
- · Monolithic probes with fixed tips.
- Durable 080 tips for long life.
- Comfort-grip probe.
- Silicone insulated 4ft (1.2m) leads fit most DMMs from Fluke, HP (Agilent), Meterman, Amprobe, Greenlee and others.

For Plug Type, see below.

\*\*Ratings: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum. Maximum voltage for hands free use: 1000 Vrms. Do not use on circuits where transient stresses can exceed the rated voltage

#### Plug Types

- 1. Right-angle DMM plug\*
- 2. Straight DMM plug\*
- 3. Stacking banana plug
- 4. Straight banana plug5. Retractable sleeve banana plug
- \* Shrouded DMM plugs fit most DMMs from Fluke, Meterman, HP, Keysight, Amprobe, Greenlee and others.





#### **Replacement DMM Test Leads**







| Model# | Application                         | Features                              | Ratings        |
|--------|-------------------------------------|---------------------------------------|----------------|
| 5907A  | Hand held DMM<br>modular test leads | Right-angle DMM plug (1)              | CAT III 1000V* |
| 5908A  | Bench-top DMM<br>modular test leads | Straight DMM plugs (2)                | CAT III 1000V* |
| 5909A  | Hand held DMM<br>modular test leads | Right-angle DMM plug at both ends (1) | CAT III 1000V* |
| 6358   | Universal DMM test leads            | Retractable sheath<br>DMM plugs (3)   | CAT III 1000V* |

Leads for Pomona Modular Test Probes.

- Plugs fit most popular DMMs from Fluke, Meterman, HP (Agilent), Amprobe, Greenlee and others.
- Silicone insulated 4ft (1.2m) leads.
- Wear indication with double insulated silicone leads for increased safety.
- Retractable sleeve plug fits all banana jacks, binding posts and DMM input jacks.

\*per IEC61010-031

- **Plug Types**1. Right-angle DMM.
  2. Straight DMM.
- 3. Retractable sheath 0.16in (4mm).

# **Replacement Modular Test Probes**



| Model# | Probe Type                    | Features                                       | Ratings        |
|--------|-------------------------------|--|----------------|
| 6232A  | Modular electrical probe      | Standard 0.08in (2.03mm) tip                   | CAT III 1000V* |
| 6479   | Industrial modular probe      | Stainless-steel 0.08in<br>(2.03mm) sharp-point | CAT III 1000V* |
| 5906A  | 6A Lantern tip Fits 4mm Jack  |  | CAT III 1000V* |
| 5689A  | Replaceable tip modular probe | Stainless-steel 0.08in<br>(2.03mm) sharp-point | CAT II 600V    |

- Modular probes fit all Pomona test leads.
- Lantern tip probes fit into banana jacks.

\*per IEC61010-031 CAT II 1000V without protective cap



#### **Replacement Modular Test Probe Sets**



| Model# | Description                               | Probe<br>Type | Test Lead<br>Type | Ratings        |
|--------|---|---------------|-------------------|----------------|
| 6286   | Standard tip with right-angle<br>DMM plug | 6232A         | 5907A             | CAT III 1000V* |

Modular test probes sets contain one set of modular probes and test leads in one package.

Silicone insulated 4ft (1.2m) leads fit most meters from Fluke, Meterman, HP (Agilent), Amprobe, Keithley, Greenlee and others.



\*per IEC61010-031 CAT II 1000V without protective cap





#### **Insulation Piercing** Clip Sets





| III Ou OI II | i cutures   | 001013              |
|--------------|---|---------------------|
| 6405         | Attach to<br>test leads 4in<br>(10.2cm) long            | Set of<br>red/black |
| 6413         | Attach to 0.080in<br>(2.03mm) probe<br>tip(10.2cm) long | Set of<br>red/black |

- Double V block centers wire
- · Set of 2, (red and black jacks)
- · Bright yellow for easy location
- · Attach to test leads

#### **Test Lead Couplers**



# Model# 6252

Banana plug splice.

Maintains overvoltage rating up to CAT III 1000V per IEC61010-031.

Use with any Pomona DMM test leads, even 0.16in (4mm plugs).

#### **Large Alligator Clip Set**



| Model# | Color                |
|--------|----------------------|
| 6041B  | Set of 2: Black, Red |

Fits on any DMM or banana plug test lead

Rating: IEC61010-031 CAT III 1000V

Jaw Opening: 1.0in (25.40mm).

### **Test Probe Tip Adapters**

| Model#  | Application   |
|---------|---|
| 6262-02 | fits comfort-grip style and<br>modular probes 6232A<br>and 6479 |
| 5682-*  | fits modular probe 5689A  |



3.27in (83.1mm)

5682

Extended Fine Point. Insulated probe for hard to reach test points.

Maximum 3A.

Std. Colors: -02 1 ea. Black, Red. \*Std. Colors: -0 Black, -2 Red.

#### **Industrial Alligator Clip Set**



#### Model# 5914

Fits on any DMM or banana plug test lead.

Rating: IEC61010-031 CAT III 600V 10A.

Jaw Opening: to 1.0in (25.40mm). \*Std. Colors: -0 Black, -2 Red.

#### **Insulated Spade Lug Adapters**



6203

| Model# |         | Color                |  |
|--------|---------|----------------------|--|
|        | 6203    | Set of 2: Black, Red |  |
|        | 1614A-* | 1 Clip               |  |

Connect banana plug patch cords to binding posts.

Fits screws or binding posts from #10: 0.32in to 0.25in (8.13mm to 6.35mm). Compatible with any Pomona banana jack shrouded or unshrouded

\*For singles, order: -0 Black, -2 Red.

# **Medium Alligator Clip Set**





| Model# | Color                |  |
|--------|----------------------|--|
| 5916B  | Set of 2: Black, Red |  |

Fits on any DMM or banana plug test lead.

Rating: CAT II 1000V, 10A. Jaw Opening: to 0.30in. (7.62mm).

#### **Alligator Clip Set for Test Probes**



| Model# | Color                |
|--------|----------------------|
| 6264B  | Set of 2: Black, Red |

Alligator Clip.

Attach to probe tip.

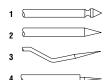
Rating: CAT II 1000V, 10A. Works with comfort-grip style and

modular electrical probes.





#### 0.08in (2.03mm) Replacement **Probe Tips**



| Item     | Features                                    |  |
|----------|---|--|
| 3        | SMD Microtip™ stainless-steel tip           |  |
| Full set | Set of all tips                             |  |
| 1(4ea)   | Nickel-plated standard tip                  |  |
| 2(2ea)   | Stainless-steel sharp point                 |  |
| 3(2ea)   | SMD Microtip™ stainless-steel tip           |  |
| 4(2ea)   | Sharp needle-point stainless-steel          |  |
|          | 3<br>Full set<br>1(4ea)<br>2(2ea)<br>3(2ea) |  |

#### 0.04in (1.01mm) Replacement **Probe Tips**



|                               | Model#                       | Item                              | Features                        |  |
|-------------------------------|------------------------------|-----------------------------------|---------------------------------|--|
|                               | 6212                         | 3                                 | Quad-point gold-plated pogo pin |  |
|                               | 6354                         | Full set                          | Set of all tips                 |  |
|                               |                              | 1                                 | Sharp gold-plated               |  |
| 2 Triple-point gold-plated po |                              | Triple-point gold-plated pogo pin |                                 |  |
|                               | 3 Quad-point gold-plated pog |                                   | Quad-point gold-plated pogo pin |  |
|                               |                              | 4                                 | Sharp stainless-steel           |  |
|                               |                              | 5 3in (76.2mm) long extende       |                                 |  |

#### **SMD Test Tweezer Products**

| Model#    | Features             | Ratings                     |  |
|-----------|----------------------|-----------------------------|--|
| 5143-K-48 | Stacking Banana Plug | 30 Vrms /42.4 Vpk/60 Vdc,3A |  |
| 5142-K-48 | BNC Male             | 30 Vrms/42.4 Vpk/60 Vdc,3A  |  |
| 5678-K-48 | Right-Angle DMM Plug | 30 Vrms/42.4 Vpk/60 Vdc, 3A |  |

0.04in (1.01mm) Min. Closed Length: 48in (1.22m) 0.33in (8.38mm) 4.40in (111.76mm) 0.1in (2.54mm) 5143 5142 5678





#### **Create Your Own Test Leads for Your Own** Specific Needs with the Following:

#### **Test Lead Wire with** Silicone or PVC Insulation



| Model# | Insulation<br>Type | Length       |
|--------|--------------------|--------------|
| 6733-* | Silicone           | 50ft (15.2m) |
| 6734-* | PVC                | 50ft (15.2m) |

- 50ft (15.2m) of unterminated 18 AWG test lead wire 50ft (15.2m lengths only.)
- Choose from heat-resistant silicone or PVC insulation.
- Very flexible with 192 strands of 41 AWG base copper conductor.
- Wear indication with double insulated silicone leads for increased safety.
- Create your own test leads with the adapters shown below.
- Wide temperature range of -58 to 302°F (-50 to 150°C) with PVC insulation.

\*Std. Colors: -0 Black, -2 Red.

See pages 31-43 for more do-it-yourself plugs.

#### **Do-It-Yourself 4mm Right Angle Banana Plug**



#### Model# 6729

Build your own safety leads with do-ityourself safety-sheathed 4mm right-angle banana plug.

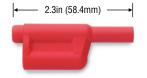
Material: Contacts: nickel-plated brass; Insulation: lucel acetal polymer.

Rating: IEC61010 1000V Category III\*\*, 20A, 14 to 131°F (-10 to +55°C).

\*Std. Colors: -0 Black, -2 Red.

\*\* When plug is correctly assembled and terminated

#### **Do-It-Yourself 4mm** Stackable Banana Plug



#### Model# 6721

Build your own safety stacking leads with do-it-yourself safety-sheathed 4mm stackable banana plugs.

Material: Contacts: nickel-plated brass, Insulation: lucel acetal polymer.

Rating: IEC61010 1000V Category III\*\*, 20A, 14 to 131°F (-10 to +55°C).

\*Std. Colors: -0 Black, -2 Red.

\*\* When plug is correctly assembled and terminated.

#### **Kelvin Probes**



#### Model# 6303

For 4-wire and 2-wire measurements. Patented design for high precision rapid testing.

Gold-plated for accuracy.

Easily move from one test point to another for rapid readings.

For use with 4-wire Kelvin meters such as Agilent 34401A, and 3458A.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/ 42.4 Vpk/60 Vdc or current exceeds 8A maximum

Length: 48in (122cm)

#### **Kelvin Lead Set with Kelvin Clips**



#### Model# 6730

- · Gold-plated Kelvin clip jaws allow 4-wire resistive measurements.
- Silicone insulated 3.3ft (1m) test lead.
- Safety sheathed straight DMM plugs for convenient bench use.
- Clips firmly grip test points for low-loss connection.

Rating: 30 Vrms/42.4 Vpk/60 Vdc

#### **Kelvin Clip Set**



#### Model# 5940

Two gold-plated clips connect to test points for 4-wire resistive measurement

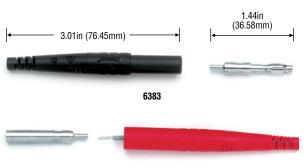
Clips open to 0.25in (6.35mm) maximum.

Gold-plated plugs and clips.

Rating: For CE compliance and for personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A maximum.

Overall Length: 26.5in (67.3cm).

### **Do-It-Yourself In-Line Sheathed (4mm) Banana Plug and Jack**



6384

| Model # | Туре |  |
|---------|------|--|
| 6383-*  | Dlug |  |
| 6383-02 | Plug |  |
| 6384-*  | look |  |
| 6384-02 | Jack |  |

- Safety-rated plugs and jacks for use with any wire from 22 to 18 AWG with flexible insulation.
- Plugs fit most sheathed DMM lacks and DMM test leads to make up your own banana plug or jack test lead or jumper.

See mating panel jacks (6387 on page 36).

Material: Banana Plug/Jack: brass; Spring: heat treated beryllium copper; Insulation: Santoprene®.

Attaches to wire by crimp or soldering.

Rating: IEC61010 CAT II 300V, 15A, +275°F (+135°C) max.

\*Std. Colors: -0 Black, -2 Red, -02 Black and Red (2 per pkg).

\*Sold in pkgs of 10.



<sup>\*</sup>see rating message at start of section.

# Find the right accessory for your test tools



# **Digital multimeter**

FLUKE ®

| Model Number | Pomona Recommended #1 | Pomona Recommended #2 | Pomona Recommended #3 |
|--------------|-----------------------|-----------------------|-----------------------|
| 179          | 7519A                 | 6343                  | 5904A                 |
| 233          | 7519A                 | 5900A                 | 6172A                 |
| 114/117      | 7519A                 | 5900A                 | 5673B                 |
| 115          | 6275                  | 6343                  | 5543B                 |
| 287          | 6341                  | 5674C                 | 6340                  |
| 289          | 7519A                 | 5899A                 | 6173A                 |
| 87V          | 5519A                 | 5673B                 | 4408                  |
| 3000 FC      | 7519A                 | 5899A                 | 5677B                 |
| 279 FC       | 7519A                 | 5899A                 | 5677B                 |
| 8845A/8846A  | 5519A                 | 5901B                 | 6204A                 |



#### **Electrical tester**

FLUKE ®

| Model Number | Pomona Recommended #1 | Pomona Recommended #2 | Pomona Recommended #3 |
|--------------|-----------------------|-----------------------|-----------------------|
| T5           | 6041B                 | 6232A                 | 5912B                 |
| T+/T+Pro     | 6041B                 | 6232A                 | 5912B                 |
| T6           | 6041B                 | 6232A                 | 5912B                 |



# **Clamp meter**

FLUKE \*

| Model Number      | Pomona Recommended #1 | Pomona Recommended #2 | Pomona Recommended #3 |
|-------------------|-----------------------|-----------------------|-----------------------|
| 902/902 FC        | 5907A                 | 6041B                 | 5900A                 |
| 323/324/325       | 5900A                 | 7519A                 | 5904A                 |
| 353/355           | 5907A                 | 6041B                 | 5673B                 |
| 370 Series/FC/381 | 5913                  | 7519A                 | 6173A                 |



#### **Insulation multimeter**

FLUKE ®

| Model Number | Pomona Recommended #1 | Pomona Recommended #2 | Pomona Recommended #3 |
|--------------|-----------------------|-----------------------|-----------------------|
| 1503/1507    | 5907A                 | 6041B                 | 5674C                 |
| 1587/1587 FC | 5907A                 | 6041B                 | 5906A                 |







## **Process tools**

FLUKE ®

| Model Number | Pomona Recommended #1 | Pomona Recommended #2 | Pomona Recommended #3 |
|--------------|-----------------------|-----------------------|-----------------------|
| 725/726      | 5912B                 | 5900A                 | 6173A                 |
| 787/789      | 7519A                 | 5900A                 | 6173A                 |





## Portable oscilloscope

FLUKE ®

| Model Number  | Pomona Recommended #1 | Pomona Recommended #2 | Pomona Recommended #3 |
|---------------|-----------------------|-----------------------|-----------------------|
| 190 Series II | 6146                  | 72941                 | 72942                 |
| 120B Series   | 6146                  | 72941                 | 72942                 |



## **Digital multimeter**

**AMPROBE**°

| Model Number | Pomona Recommended #1 | Pomona Recommended #2 | Pomona Recommended #3 |
|--------------|-----------------------|-----------------------|-----------------------|
| AM-510       | 5907A                 | 6041B                 | 5673B                 |
| AM-530       | 5519A                 | 5900A                 | 5673B                 |



## **Clamp multimeter**

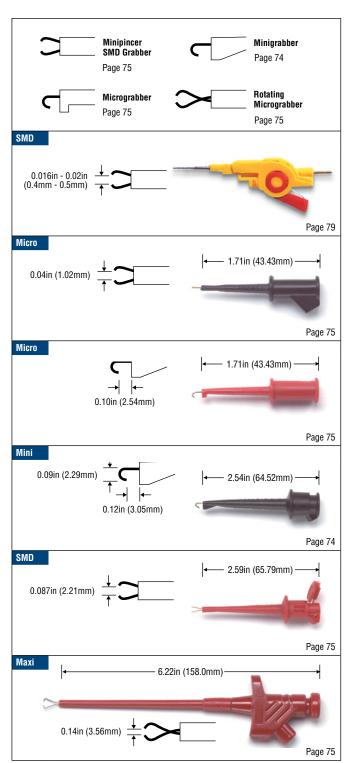
**AMPROBE**°

| Model Number | Pomona Recommended #1 | Pomona Recommended #2 | Pomona Recommended #3 |
|--------------|-----------------------|-----------------------|-----------------------|
| AMP-220      | 5907A                 | 6041B                 | 5673B                 |
| AMP-330      | 5519A                 | 5900A                 | 5673B                 |
| ACD-14-PRO   | 7519A                 | 5900A                 | 6173A                 |



## **Grabbers and Test Clips**

Pomona Electronics' Grabber® Test Clips connect rapidly to component test leads, terminals and IC leads. Specially designed tips slide easily onto wire-wrap terminals. And do-it-yourself Grabber test clips can be assembled quickly and easily by the user.



### Minigrabber® Test Clip with Banana Jack



#### Model# 4723-\*

Banana Jack built into plunger. Overall Length: 2.54in (64.52mm). Rating: Maximum voltage for hands free use. 300V. 5A, 216°F (+102°C) max.

\*Std Colors: -0 Black, -2 Red.

## **Do-It-Yourself** Minigrabber® Test Clip

| s | 3925-* | 0.090in  | 216°F   |
|---|--------|----------|---------|
| 3 |        | (2.29mm) | (102°C) |
|   | 4555-* | 0.144in  | 300°F   |
|   |        | (3.55mm) | (149°C) |
|   |        |          | ,       |

Model# | Max. Wire Dia. | Temperature



Overall Length: 2.35in (59.69mm). Rating: Maximum voltage for hands free use: 300V. 5A, +216°F (+102°C) max.\*

Std Colors: -0 Black, -2 Red.

|  | Model# | Features   |  |
|--|--------|--|--|
|  |        | Kit contains 2 pcs. of 3925,<br>one black/one red  |  |
|  | 5522   | Kit contains 10 pcs. of 3925,<br>one of each color |  |

## Minigrabber® Test Clip with Pin Tip Jack



#### Model# 4826-\*

A pin jack is built right into the plunger, allowing this test clip to be attached directly to the end of a pin tip patch cord. It can also be used as an adapter for test probes with 0.080in (2.03mm) tips.

Overall Length: 2.54in (64.52).

Rating: Maximum voltage for hands free use: 300V. 5A, 216°F (+102°C) max..

\*Std Colors: -0 Black. -2 Red.

## Oscilloscope Probe Tip **Adapter**



| Model# | Probe Type     |
|--------|----------------|
| 6553   | Modular Series |

- · Adapter attaches directly to the oscilloscope probe tip.
- Designed for use with Micro SMD Grabber Test Clips.

Ratinus: The components in this section have a hands free rating for use in controlled voltage environments. However, for CE compliance these products are not intended for hand held use at voltages above 33 Vrms/70 Vdc.

## **Grabbers and Test Clips**



#### SMD Grabber® Test Clip with 0.025in (0.635mm) Square Pin



| Model# | Features          |
|--------|-------------------|
| 5360   | Sold Individually |

Pincer type contact designed for testing 0.05in (1.25mm) lead pitches such as SOJ, SOIC and PLCC surface mounted packages.

0.15in (3.81mm) sq. access hole leads to 0.025in (0.635mm) sq. pin.

Overall Length: 1.73in (43.94mm).

Rating: Maximum voltage for *hands free use*: 150V. 0.5A, 216°F (+102°C) max.

\*Std Colors: -0 Black, -2 Red.

0.025in (0.635mm) Square Pin Patch Cords

available, see page 53.

## Do-It-Yourself SMD Grabber® Test Clips



| Model# Max. Wire Dia.          |   |
|--------------------------------|---|
| <b>5243-*</b> 0.090in (2.29mm) |   |
| 5520                           | Kit containing 10 pcs of 5243 one of each color |

Pincer type contact designed for testing 0.05in (1.27mm) lead pitches such as SOJ, SOIC and PLCC surface mounted packages.

**Overall Length:** 1.71in (43.43mm).

Rating: Maximum voltage for hands free use: 150V. 0.5A, 216°F (+102°C) max.

\*Std Colors: -0 Black, -2 Red.

### Do-It-Yourself Minipincer® Test Clip



#### Model# 5418-\*

Pincer type contact.

**Overall Length:** 2.59in (65.79mm). **Rating:** Maximum voltage for *hands free* 

*use*: 300V. 5A, 176°F (+80°C) max. \***Std Colors:** -0 Black, -2 Red

For pincer dimensions see page 74.

## Miniature Alligator Test Clip with 2mm Banana Jack



## 5788-\*

Jaw Opening: 0.24in (6.10mm) max.

Overall Length: 1.57".

Rating: 45V, +80°C (+176°F) max. \*Std. Colors: -0 Black, -2 Red. Sold in pkgs of 10 per color.

#### Mini-alligator Clip with 2mm Jack





| Model#  | Color |
|---------|-------|
| 72924-0 | Black |
| 72924-2 | Red   |

Rating: 600V CAT II, 10A.

#### Do-It-Yourself Micrograbber® Test Clips



| Model# Features |   |
|-----------------|---|
| 4233-*          | -0 Black, -2 Red,<br>-5 Green, -9 White |

Overall Length: 1.71in (43.43mm).

Material: Gold plated brass

Rating: 150V, 3A, +216°F (+102°C) max.

For hook dimensions see page 74.

## Medium Alligator Clip Set



| Model# | Features                        |
|--------|---------------------------------|
| 5916B  | Set of 2 Clips Black<br>and Red |

Insulated clip with sheathed 0.16in (4mm) receptacle accepts flexible lead sets 5907A, 5908A, 5909A.

Jaw Opening: 0.30in (7.62mm) max. Overall Length: 2.91in (73.9mm). Rating: CAT II 1000V, 10A.

### Micrograbber® Test Clip with 0.025in (0.635mm) Square Pin



| Model# | Features          |
|--------|-------------------|
| 4521*  | Sold individually |

\*Std Colors: -0 Black, -2 Red.

Model# 5830-\*

### Large Alligator Clip Set



| Model#  | Features                        |
|---------|---------------------------------|
| 6041B   | Set of 2 Clips Black<br>and Red |
| 6042B-* | 1 Clip                          |

Insulated clip with sheathed 0.16in (4mm) receptacle accepts flexible lead sets 5907A,

5908A and 5909A (p. 63). **Jaw Opening:** 1.0in (25.40mm) max.

Overall Length: 3.5in (88.90mm).

Rating: Conforms to IEC61010-2-031,
Overvoltage CAT III, 1000V, 20A max.

## Do-It-Yourself Flexible Maxigrabber® Test Clips



Rotating pincer type contact for easier access. Standard banana jack and screw for direct wire termination.

Overall Length: 6.22in (157.9mm).

Rating: Maximum voltage for hands free use: 250V.

\*Std Colors: -0 Black, -2 Red. For pincer dimensions see page 74.

### Alligator Test Clip to Banana Jack, with Insulator, Solderable



| Model# | Plating | Features                     |
|--------|---------|------------------------------|
| 2240-* | Nickel  | 10 clips and insulators/pkg. |
| 6567   | Nickel  | 10 clips w/o insulators/pkg. |

**Jaw Opening:** Alligator clip has 0.30in (7.62mm) max.

Overall Length: 2.16in (54.86mm).

Rating: Maximum voltage for *hands free use*: 150V. 5A, 122°F ( $\pm$ 50°C) max.

\*Std Colors: -0 Black, -2 Red.

Sold unassembled.



## **SMD/Micro Format Test**

Components and circuit boards are getting smaller and smaller. Pomona makes your job easier by providing clips and leads designed for micro-test, including a variety of 2mm connectors for use in tight spaces. From clips designed for chip pitches down to 0.008in (0.2mm), to patch cords, and even complete SMD test kits, Pomona has the connection you need.

## **SMD Multi-Use Test Kit**



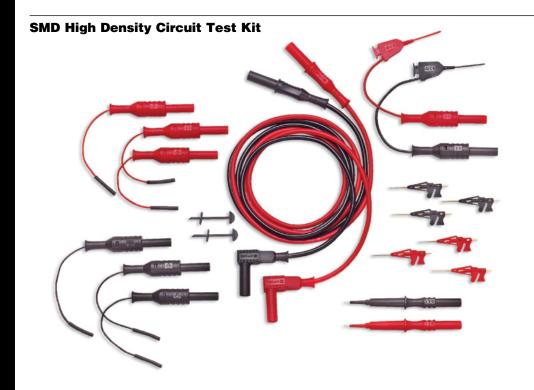
#### Model# 72928

SMD test kit designed for multiple small format test applications.

#### Kit includes:

| 1.72902-0    | Micro SMD Grabber Test Clips, (Black)                                      |
|--------------|--|
| 2.72902-2    | Micro SMD Grabber Test Clips, (Red)  |
| 3.72906-0    | Mini SMD Grabber Test Clips, (Black)                                       |
| 4.72906-2    | Mini SMD Grabber Test Clips, (Red)   |
| 5.72905-0    | Clip lead for Micro SMD Grabber - 0.8mm female/4 mm female, (Black)        |
| 6.72905-2    | Clip lead for Micro SMD Grabber - 0.8mm female/4 mm female, (Red)          |
| 7.5908A      | Bench-top DMM Modular Test leads   |
| 8.72920-39-0 | Multi-stacking 2mm safety sheathed patch cords, PVC, 100mm (39in), (Black) |
| 9.72920-39-2 | Multi-stacking 2mm safety sheathed patch cords, PVC, 100mm (39in), (Red)   |
| 10.72923-0   | SMD test probe with sharp, spring mounted tip, 2mm jack, (Black)           |
| 11.72923-2   | SMD test probe with sharp, spring mounted tip, 2mm jack, (Red)             |
| 12.72917-0   | 4mm banana plug to 2mm sheathed banana jack adapter, (Black)               |
| 13.72917-2   | 4mm banana plug to 2mm sheathed banana jack adapter, (Red)                 |
| 14.72924-0   | Mini-alligator clip with 2mm jack, (Black)                                 |
| 15.72924-2   | Mini-alligator clip with 2mm jack, (Red)                                   |

Large Folding Test Kit Pouch



### Model# 72935

SMD test kit designed for probing high density circuits.

Kit includes: 2 DMM leads with 4mm plugs, 2 test probes with spring-loaded tips, 6 micro SMD grabbers (72902), 6 adapter leads 0.8mm female to 0.4mm jack, 2 mini SMD grabbers with 4mm connectors, 2 holding rods (72903).



#### **Micro SMD Grabber Test Clips Kit**



| Model# | Includes                   |  |
|--------|----------------------------|--|
| 72902  | 12 clips, 12 leads, 6 rods |  |

Kit of 12 Micro SMD Grabbers in 6 colors. Grabbers are designed for easy attachment to SMD chips with pitches down to 0.008in (0.20 mm). Thin yet durable design permits attachment with close spacing in tight areas. Insulated tip minimizes shorting on adjacent pins. Gold plating for low resistance connections. Kit also includes 6 holding rods to reinforce connection positions during side-by-side measurements (order Model# 72903). In addition, kit includes 12 micro leads with 0.8mm female/0.8mm male connectors

#### **Clip lead for Micro SMD** Grabber 0.8mm/2mm



| Model#  | Color |
|---------|-------|
| 72904-0 | Black |
| 72904-2 | Red   |

Clip lead for easy attachment of Micro SMD Grabber to test leads with 2mm plugs. 0.8mm female/2 mm female.

#### Micro SMD Grabber **Test Clips**



| Model#  | Color           |
|---------|-----------------|
| 72902-0 | Singles - Black |
| 72902-2 | Singles - Red   |

Designed for easy attachment to SMD chips with pitches down to 0.008in (0.20 mm). Thin yet durable design permits attachment with close spacing in tight spaces. Insulated tip minimizes shorting on adjacent pins. Gold plating for low resistance connections. Holding rods available to reinforce connection positions during side-by-side measurements (order Pomona model number 72903). Order Pomona model number 72905-0 for clip lead for Micro SMD Grabber—0.8mm female/4 mm female (black) or 72905-2 (red) for easy attachment to standard test leads. 72902 includes one black and one red clip. (Black).

#### **Clip lead for Micro SMD** Grabber 0.8mm/4mm



| Model#  | Color |
|---------|-------|
| 72905-0 | Black |
| 72905-2 | Red   |

Clip lead for easy attachment of Micro SMD Grabber (Pomona 72902) or Mini SMD Grabber (Pomona 72906) to standard test leads. 0.8mm female/4 mm female.

## Mini SMD Grabber **Test Clips**



| Model#  | Color |
|---------|-------|
| 72906-0 | Black |
| 72906-2 | Red   |

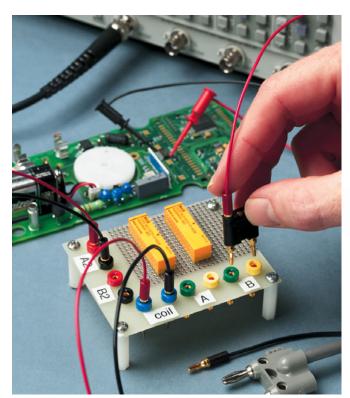
Designed for easy attachment to SMD chips with pitches down to 0.032in (0.80 mm). Insulated shaft can be bent up to 36 degrees for versatile attachment in awkward locations or close proximity to other clips. Rotating jaws increase versatility in connection and stacking. Thin (3mm) profile allows close placement to adjacent clips. Compatible with leads with 0.80 mm female connectors. Order Pomona model number 72905-0 for clip lead for SMD Mini Grabber-0.8mm female/4 mm female (black) or 72905-2 (red) for easy attachment to standard test leads.

## **Holding Rods for** Micro SMD Clips



## Model# 72903

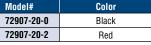
Holding rods reinforce 72902 connection positions during side-by-side measurements. (10/pkg).





## **SMD/Micro Format Test**





with Sharp, Spring **Mounted Tip** Mini SMD Grabber Test Clip (Pomona

| Model#  | Color |
|---------|-------|
| 72923-0 | Black |
| 72923-2 | Red   |

72906) with 20 inch (50cm) lead and 2mm Jack.

**SMD Test Probe** 

SMD test probe with sharp, spring mounted tip and 2mm jack. Provides ultra-fine control for probing high density SMD circuits. Very fine 0.03in (0.7mm) diameter stainless steel tip is spring-mounted for controlled pressure. Removable, clear IC insulator cap prevents shorting of adjacent IC loges. Sheathed 2mm receptacle adapts to 2mm test leads and adapters.

Rating: 600V CAT III, 1A.



| Model#     | Color |
|------------|-------|
| 72929-20-0 | Black |
| 72929-20-2 | Red   |

Mini SMD Grabber Test Clip (Pomona 72906) with 20 inch (50cm) lead and 4mm Jack for easy attachment to DMM leads

## **Do-it-yourself 2mm Stackable Safety Sheathed Plug**



| Model#  | Color |
|---------|-------|
| 72925-0 | Black |
| 72925-2 | Red   |

Rating: 600V CAT II 10A.



| Model#     | Length       | Color |
|------------|--------------|-------|
| 72920-20-0 | 20in (50cm)  | Black |
| 72920-20-2 | 20in (50cm)  | Red   |
| 72920-39-0 | 39in (100cm) | Black |
| 72920-39-2 | 39in (100cm) | Red   |

Multi-stacking 2mm safety sheathed male/male patch cords, PVC.

Rating: 600V CAT II, 10A max.



**2mm Safety Sheathed** 

| Model#     | Length       | Color |
|------------|--------------|-------|
| 72919-39-0 | 39in (100cm) | Black |
| 72919-39-2 | 39in (100cm) | Red   |

2mm safety sheathed male/male patch cords, PVC.

#### 2mm/4mm Male-male Test Leads



| Model#  | Length         | Color |  |  |
|---------|----------------|-------|--|--|
| 72936-0 | 3.9in (99.1mm) | Black |  |  |
| 72936-2 | 3.9in (99.1mm) | Red   |  |  |

Provides a quick and easy configuration between a 4mm sheathed banana jack to a 2mm sheathed banana jack.



Color

Black

## Mini-alligator Clip with 2mm Jack



| 72924-0 | Black |
|---------|-------|
| 72924-2 | Red   |
|         |       |

Color

Rating: 600V CAT II, 10A.

Model#

## 2mm Safety Sheathed Jacks



**2mm Safety Sheathed** 

Jack with Solder Tab

| Model#  | Color |
|---------|-------|
| 72921-0 | Black |
| 72921-2 | Red   |

2mm safety sheathed jack with 1.9mm wire wrap connecting pin.

**Materials:** *Contacts:* Nickel plated brass. *Insulation:* Polyamide.

Rating: 600V CAT II, 10A.

Model#

72922-0

72922-2

Insulation: Polyamide.

Rating: 600V CAT II, 10A.

## Rotating Micrograbber<sup>®</sup> Test Clip with Two 0.025in (0.635mm) Square Pins



| Model# | Features          |
|--------|-------------------|
| 5790-* | Sold individually |

Use when testing IC leads at 0.05in (1.25mm) pitch or in other tight situations. Pincers rotate for ease of access.

Overall Length: 2.12in (53.85mm)
Rating: 33 Vrms/70 Vdc
\*Std Colors: -0 Black, -2 Red.

# 4mm Safety Banana

Plug Adapter

Jack to 2mm Banana



| Model# | Color |
|--------|-------|

One Black and One Red

Black

Red

Materials: Contacts: Nickel plated brass,

Accepts 4mm safety-sheathed banana

plugs. 10/pkg.

72914-02

72914-0

72914-2

Rating: 33 Vac/70 Vdc, 36A

#### Micro SMD Grabber® Test Clip for 0.05 to 0.01in (1.25 to 0.2 mm) Lead Pitch

| Model# | Profile<br>Height      | Lead Pitch                    | Tip   | Qty | Colors |
|--------|------------------------|-------------------------------|-------|-----|--------|
| 6442   | 0.28in<br>(7mm)<br>low | 0.05 -0.01in<br>(1.25 -0.3mm) | Long  | 10  | 10     |
| 6351   | 0.55in<br>14mm         | 0.03 -0.01in<br>(0.85 -0.2mm) | Long  | 10  | 2      |
| 6352   | 0.55in<br>14mm         | 0.05 -0.01in<br>(1.25 -0.3mm) | Long  | 10  | 2      |
| 6353   | 0.55in<br>14mm         | 0.05 -0.01in<br>(1.25 -0.3mm) | Short | 10  | 2      |





- Use with PQFP, SOIC, TSOP and SSOP packages with lead pitches down to 0.01 to 0.02in (0.2 to 0.5 mm).
- Thin body allows an unlimited number of clips to be stacked side by side.
- Maximum frequency is 100MHz.

Rating: For CE compliance and personal safety, do not hold in hand when voltages exceed 30 Vrms/42.4 Vpk/60 Vdc or current exceeds 8A mximum.

Maximum voltage for *hands free use*: 70 Vrms max.

Supplied with female to male flying leads.

#### 4mm Banana Plug to 2mm Sheathed Banana Jack Adapter



| Model#  | Color |
|---------|-------|
| 72917-0 | Black |
| 72917-2 | Red   |

Accepts 2mm safety-sheathed banana plugs. 10/pkg.

Rating: 33 Vac/70 Vdc, 10A.



## Oscilloscope Probes and Accessories

Pomona's oscilloscope probes give you the full range you need designed, rated, and specified to match the bandwidth of your instrument, they provide you with full voltage read-out over the entire rated bandwidth of each probe.

## **Modular Passive Oscilloscope Probes**



Featuring a new, compact, ergonomically designed probe handle, these modular general purpose passive voltage probes are ideal for use with a wide variety of oscilloscopes. They also feature a spring-loaded, pogo-pin replaceable tip. The fine tip probes are perfectly suited for probing high-density chip leads with less than 0.060in (1.52mm) spacing. Modular in design, the probe handle is capable of receiving a variety of spring-loaded and fixed tips, providing greater testing versatility. An affordable, versatile probe for many uses.

Probe sets includes the probe, BNC adapter, ground blade, 8.7in (22cm) ground lead, IC tip adapters with 0.8mm to 1.27mm pitch, insulating tip, protection cap, solid tip, spring tip, sprung hook, trimmer tool, 2 footer positioner, and complete set of instructions and specifications.

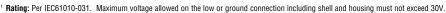
| Model# | Probe<br>Ratio | Maximum Input<br>Voltage CAT II <sup>1</sup> | Recommended<br>Scope Bandwidth<br>MHz | Bandwid<br>(-3)<br>(Probe) | dB) | System<br>Risetime<br>(ns) | Probe Input Resistance (M $\Omega$ ) | Probe Input<br>Capacitance (pF) | Compensation<br>Range (pF) | Readout<br>Actuator <sup>2</sup> | Cable Length |
|--------|----------------|--|---------------------------------------|----------------------------|-----|----------------------------|--------------------------------------|---------------------------------|----------------------------|----------------------------------|--------------|
| 6491   | 1:1            | 55 V   | 60                                    | 30                         | 1   | < 12                       | 1                                    | < 39.5                          | -                          | -                                | 4ft (1.2m)   |
| 6493   | 10:1           | 300 V  | 60                                    | 150                        | -   | < 2.4                      | 10                                   | < 12.5                          | 15 - 40                    | No                               | 4ft (1.2m)   |
| 6494   | 10:1           | 300 V  | 60                                    | 150                        | -   | < 2.4                      | 10                                   | < 12.5                          | 15 - 40                    | Yes                              | 4ft (1.2m)   |
| 6495   | 10:1           | 300 V  | 100                                   | 250                        | -   | < 1.4                      | 10                                   | < 12.5                          | 10 - 35                    | No                               | 4ft (1.2m)   |
| 6496   | 10:1           | 300 V  | 350                                   | -                          | 350 | < 1                        | 10                                   | < 14.5                          | 10 - 35                    | No                               | 4ft (1.2m)   |
| 6497   | 10:1           | 300 V  | 350                                   | 1                          | 350 | < 1                        | 10                                   | < 14.5                          | 10 - 35                    | Yes                              | 4ft (1.2m)   |
| 6498   | 100:1          | 1000 V                                       | 500                                   | -                          | 400 | < 0.9                      | 50                                   | < 7.5                           | 10 - 50                    | No                               | 6.6ft (2m)   |
| 6499   | 1:1<br>10:1    | 55 V<br>300 V                                | 60                                    | 20<br>150                  | -   | < 18<br>< 2.4              | 1<br>10                              | < 78<br>< 13                    | -<br>15 - 40               | No                               | 4ft (1.2m)   |
| 6500   | 1:1<br>10:1    | 55 V<br>300 V                                | 100                                   | 30<br>250                  | -   | < 12<br>< 1.4              | 1<br>10                              | < 80<br>< 13                    | NA<br>10 - 35              | No                               | 4ft (1.2m)   |

#### Replacement Accessory Kit: 73040

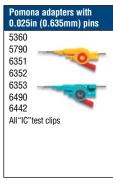
## Kit includes:

Retractable Hook Tip **BNC** Adapter Insulating Tip Trimmer Tool 8.7in (22cm) Ground Lead with Alligator Clip 1 ea. Rigid Probe Tip 1 ea. Spring Probe Tip





test clips and grabbers using 0.025in (0.635mm) connection pins.



<sup>&</sup>lt;sup>2</sup> Any oscilloscope that uses the Tektronix® style range actuator

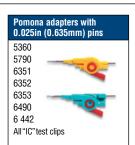


### **Microline Passive Oscilloscope Probes**



500 MHz X10 Passive Voltage Probe 4ft (1.2m) cable, 500V peak.

The perfect solution for accessing hard-to-reach test points, particularly fine pitch IC leads. The Microline Probe features a 500 MHz X10 passive voltage probe compactly designed for on-the-go field service or in the lab.



## Replacement Accessory Kit: 73040

Kit includes: Retractable Hook Tip **BNC** Adapter Insulating Tip Trimmer Tool 8.7in (22cm) Ground Lead with Alligator Clip

1 ea. Rigid Probe Tip 1 ea. Spring Probe Tip



This adapter provides an easy, fast, and reliable way to connect your oscilloscope probe to IC test adapters, test clips and grabbers using 0.025in (0.635mm) connection pins.

| Model# | Probe<br>Ratio | Maximum Input<br>Voltage CAT I <sup>1</sup> | Recommended<br>Scope Bandwidth<br>MHz | System<br>Bandwidth MHz<br>(-3dB) | System<br>Risetime<br>(ns) | Probe Input Resistance (M $\Omega$ ) | Probe Input<br>Capacitance (pF) | Compensation<br>Range (pF) | Readout<br>Actuator <sup>2</sup> | Cable Length |
|--------|----------------|---|---------------------------------------|-----------------------------------|----------------------------|--------------------------------------|---------------------------------|----------------------------|----------------------------------|--------------|
| 6551   | 10: 1          | 300 V                                       | 500                                   | 500                               | < 0.7                      | 10                                   | < 11                            | 10 - 20                    | Yes                              | 4ft (1.2m)   |
| 6554   | 10: 1          | 300 V                                       | 500                                   | 500                               | < 0.7                      | 10                                   | < 11                            | 10 - 20                    | No                               | 4ft (1.2m)   |

<sup>1</sup> Rating: Per IEC61010-031. Maximum voltage allowed on the low or ground connection including shell and housing must not exceed 30V.

## **Insulated Oscilloscope Probes for Portable Applications**



#### **Features**

- · With a CAT II, 600 V (CAT III, 300 V) rating, these probes are perfect for use with portable oscilloscopes.
- And with a 500 MHz bandwidth, these probes provide plenty of headroom for those high frequency measurements.
- · Fully Insulated.
- Meets IEC 61010-031.
- · Ergonomic Design with Comfort Grip.

#### **Accessories Included**

- · Push-On Hook Clip.
- Push-On Reference Contact.
- Reference lead with alligator clip for the connection to the 0.2 mm safety socket in the handle.

| Model#      | Probe Ratio | Maximum Input<br>Voltage CAT II <sup>1</sup> | Bandwidth<br>(MHz) | Input Resistance (M $\Omega$ ) | Input Capacitance<br>(pF) | Approximate<br>Risetime (ns) | Compensation<br>Range (pF) | Cable Length |
|-------------|-------------|--|--------------------|--------------------------------|---------------------------|------------------------------|----------------------------|--------------|
| 72940-*     | 10: 1       | 600 V  | 500                | 10                             | 13                        | 1                            | 10 - 30                    | 4ft (1.2m)   |
| 72941 (set) | 10: 1       | 600 V  | 500                | 10                             | 13                        | 1                            | 10 - 30                    | 4ft (1.2m)   |
| 72942       | See page 65 |  |                    |                                |                           |                              |                            |              |

<sup>1</sup> Derated with frequency.

<sup>&</sup>lt;sup>2</sup> Any oscilloscope that uses the Tektronix® style range actuator

<sup>&</sup>lt;sup>2</sup> For oscilloscopes with 1MΩ input resistance.

<sup>\*</sup>Standard Colors: -2 Red, -8 Gray



## Audio/Video/Broadcast

Whether setting up your own home theater or looking for connectors for that next broadcast event, Pomona audio/video/broadcast accessories get you connected reliably. From F connectors to phono jacks, look to Pomona for parts you can depend on.

## **BNC Female to Phono** (RCA) Male



#### Model# 5319

Rating: Maximum voltage for hands free use: 500 Vrms, 216°F (+102°C) max.

BNC: Center Contact: gold-plated.

#### **BNC Female to Two** Conductor, 0.14in (3.5mm) **Dia. Mini Phone Plug**



#### Model# 3837

Rating: Maximum voltage for hands free use: 500 Vrms, +257°F (+125°C) max.

Convert 2 conductor audio jacks to BNC.

#### **BNC Male to Phono Jack**



#### Model# 4054

Rating: Maximum voltage for hands free use: 500 Vrms, +257°F (+125°C) max.

#### 1/4 in, PC Board Mount **Phone Jacks**



| Model# | Туре                           |
|--------|--------------------------------|
| 7158   | PC board mount,<br>3-conductor |
| 7159   | PC board mount,<br>2-conductor |
| 7160   | PC board mount,<br>3-conductor |

## F Adapters and PCB **Mount Connector**



| Model# | Description              |
|--------|--------------------------|
| 6802   | F (F/F) Bulkhead adapter |

**Material:** This 75  $\Omega$  connector is designed for fast installation with no crimping. Connector is precision machined brass with nickel plating and gold plated center contact.

#### PC board mounts for connection with standard commercial phone plugs. Solderable with nickel silver contacts.

## **BNC Female to 1/4in** (6.35mm) Phone Plug



#### Model# 1297

Rating: Maximum voltage for hands free use: 500 Vrms, +257°F (+125°C) max.

Convert 2 conductor audio jacks to BNC.

## **BNC Male to 1/4in (6.35mm)** Two Conductor Phone Jack Rating: Maximum voltage for



#### Model# 4043

hands free use: 500 Vrms, +257°F (+125°C) max.

Convert 2 conductor phone plugs to BNC.

## Audio/Video/Broadcast



#### F Within Series Adapters



| Model# | Туре                        |
|--------|-----------------------------|
| 6712   | F (m/f) Right angle         |
| 6713   | F (m/f) In line,<br>Push-on |

Material: Machined, nickel-plated brass

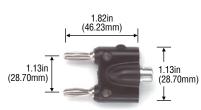
## RCA (phono) Jack



#### 6880

Sleek silver and gold compact design. Handles up to 6.0mm (0.24in) O.D. cable. Body is made of die cast zinc alloy with tarnish resistant nickel-plating. Contacts are gold-plated brass.

### **Phono Jack to Double Stacking Banana Plug**



#### Model# 1442

Rating: Maximum voltage for hands free use: 500 Vdc, +122°F (+50°C) max.

Permits phono plug to be used with equipment having standard banana jacks or binding posts.

## **RCA** (phono) Plug



#### 6881

Sleek silver and gold compact design. Handles up to 6.0mm (0.24in) O.D. cable. Body is made of die cast zinc alloy with tarnish resistant nickel-plating. Contacts are gold-plated brass.

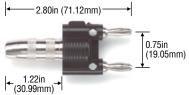
## 1/4 in Plug/RCA Jack



#### 6878

Two pole mono-to-mono adapters in easy-to-use configurations. Contacts are nickel-plated brass.

### 1/4in (6.35mm) Phone **Jack to Double Stacking Banana Plug**



#### Model# 4044

Rating: Maximum voltage for hands free use: 500 Vrms, +122°F (+50°C) max.

2 conductor 0.25in (6.35mm) dia. phone jack.



## **Automotive**

Offering a variety of test accessories designed specifically for the automotive environment, Pomona simplifies automotive diagnostics. Pomona automotive accessories give you access to wiring or cables in congested engine compartments, under-dash wiring harnesses, and other generally hard-to-reach places.

#### **Insulation Piercing** Clip Sets



6405

Model#

6405 Set of red/black Attach to test leads 6413 Attach to 0.080in Set of red/black (2.03mm) Probe tip

- Double V block centers wire.
- 6405, 6413: set of 2, (red and black jacks).

**Features** 

- Bright yellow for easy location.
- Attach to test leads.



#### Model# 6262-02

- Sharp point to pierce insulation or weather boot up to 2in (50.8mm) deep.
- For low voltage use < 30V.
- Set of 2 (red + black).
- Fits comfort-grip style and modular probes 6232A and

## **Insulation Piercing** Maxigrabber® Test Clip Set



#### Model# 5913

Insulated probe for hard to reach test points.

Colors

Set of 2, red and black.

## **Test Connector Adapter Set**



#### Model# 6481

- · Full set of pin and socket adapters
- 18 piece set includes one black and red pin and socket of each size.
- Contact sizes: 0.03in (0.75mm), 0.04in (1mm), 0.06in (1.5mm), 0.10in (2.5mm).
- Includes Silicone insulated 4ft (1.22m) leads to fit most DMMs from Fluke, Amprobe, Greenlee and others.





#### Model# 4408M

- Magnetic, attach to tool box or other steel cabinet.
- Neat storage for leads.
- Easy access.

## **Coaxial Lead Set Lead Set**



#### Model# 6534

- Complete set of coaxial leads.
- Molded strain relief.
- Seven piece set from 1 to 10ft (0.3 to 3.05m).
- Standard BNC connectors fit oscilloscopes and other instruments.

#### **Basic Backprobe Pins**



## Model# 6411

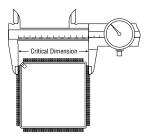
- Make connection to terminals inside connectors up to 1in (25.40mm) deep.
- For low voltage use < 30V.
- Pkg of 10.

## **IC Test Clips and Adapters**

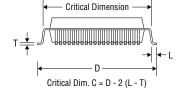


Innovative solutions. Pomona Electronics' IC Test Clips—signed for your chip. Uniquely designed for testing surface mount devices—easily, securely and successfully. Low-profile fine-pitch chips, densely populated boards, or vertical boards, POMONA test clips connect you with confidence.

## How to Measure or Calculate the Critical Dimension for Your QFP Test Clip

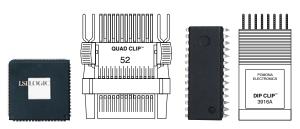


Measure Critical Dimension with calipers parallel to the plane of the PCB



### **Test Clip Selection Made Easy**

To select the Pomona IC Test Clip specifically designed for your chip, find the table for your chip type and follow the selection procedure outlined in this section.



#### PLCC

To find your PLCC Quad Clip® test adapter, see PLCC table on page 85 and reference the following characteristics of your target chip:

- 1. Number of Leads
- 2. Body Size

#### DIP

To find your DIP test clip, see DIP table on page 86 and reference the following characteristics of your target chip:

- 1. Number of Leads
- 2. Test Clip Contact Style (see Fig. 1 and 2, page 86)



- 1. Number of Leads
- 2. Confirm Body Width Compatibility
- 3. For Lower and Top Test Clip Width (see Fig. 1, 2 and 3, page 86)

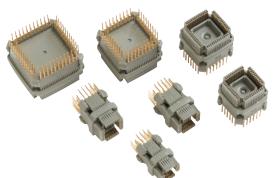
## **PLCC Test Clips**

Pomona's low-cost Quad Clip® test clips quickly lock onto J-leaded PLCCs, providing easy access for testing surface-mounted devices. PLCC test clips attach to PLCC chips with a sliding cam that clamps onto the chip body. Access to chip leads is provided by 0.025in (0.635mm) pins at 0.100in (2.54mm) spacing. Pomona offers a Quad Clip® test clip to fit all currently available PLCC chip sizes.

Lead Pitch: 0.050in (1.27mm)

|                  | X Min.          | Y Min.          |
|------------------|-----------------|-----------------|
| Single Testing   | 0.120in (3.1mm) | 0.110in (2.8mm) |
| Adjacent Testing | 0.325 (8.3mm)   | 0.285 (7.2mm)   |









| Model# | No.<br>Leads | Lead<br>Pattern | Body Size                              | Typical Applications                                    |
|--------|--------------|-----------------|--|---|
| 5279   | 20           | 5 X 5           | 0.36in X 0.36in<br>(9.14mm x 9.14mm)   | Intel 85C220  |
| 5280   | 28           | 7 X 7           | 0.46in X 0.46in<br>(11.68mm x 11.68mm) | Intel 5C60, 85C224, Philips<br>8XC751, Raytheon TMC1173 |
| 5733   | 32           | 7 X 9           | 0.46in X 0.56in<br>(11.68mm x 14.22mm) | AMD 29F040, Xicor X28TC256,<br>Cypress CY7B991          |
| 5281   | 44           | 11 X 11         | 0.63in X 0.63in<br>(16.00mm x 16.00mm) | AMD MACH110, 80C88,<br>Seimens SAB-C501                 |
| 5312   | 52           | 13 X 13         | 0.75in X 0.75in<br>(19.05mm x 19.05mm) | Intel 87C196, 87C196,<br>Motorola 68008                 |
| 5401   | 68           | 17 X 17         | 0.95in X 0.95in<br>(24.13mm x 24.13mm) | Intel 80C188, AMD MACH220,<br>Hitachi H8/330            |
| 5402   | 84           | 21 X 21         | 1.15in X 1.15in<br>(29.21mm x 29.21mm) | AMD MACH130, Altera<br>EPF8452, Cirrus Logic CLi6005    |
| 5515A  | 20-84        | _               | -                                      | PLCC Clip Kit containing 1 of<br>each size PLCC Clip    |



## **IC Test Clips and Adapters**

### **DIP Test Clips**





| Model# | No.<br>Leads | Chip Width     | Contact<br>Style | Contact<br>Material | Typical Applications  | Fig. |
|--------|--------------|----------------|------------------|---------------------|-----------------------|------|
| 5014   | 14           | 0.3in (7.62mm) | Closed           | Nickel Silver       | -                     | 1    |
| 5114   | 14           | 0.3in (7.62mm) | Open             | Nickel Silver       | -                     | 2    |
| 3916A  | 16           | 0.3in (7.62mm) | Closed           | Nickel Silver       | Analog Devices AD7715 | 1    |
| 5220   | 20           | 0.3in (7.62mm) | Open             | Gold Plate          | -                     | 2    |

Pomona DIP Test Clips provide fast, reliable and secure connections to socketed and through-hole DIP chips. Available in two styles, DIP Test Clips give you the option of full coverage of clip contacts for maximum durability or open contacts at the board level for easier access to chip leads.

Fig.1: Spring-actuated clip features gold-plated beryllium copper or spring-tempered nickel silver pins to assure positive contact in a firm wiping action for hands-free testing.

Fig. 2: Clip features same construction as Figure 1 except for an opening on the outside of the contact housing to permit probing while the clip is attached

## **SOIC/SOJ Test Clips**

SOIC Clip® test clips feature a narrow-profile design that makes testing SOIC and SOJ chips on densely-populated boards easier and safer.

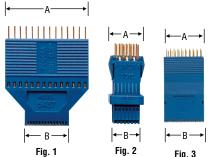


Fig. 2:

#### Fig. 1: Spring-loaded SOIC Clip® attaches to target chip and holds on with spring pressure against the chip body. Contacts on top of the clip are 0.025in (0.635mm) pins at 0.10in (2.54mm) spacing. Designed to attach to surface-mounted chips with either gull

wing or "J" leads.

This 14-pin clip features a slider that presses the contact housings against the chip and provides a more secure connection on surface mounted chips with gull wing or "J" leads. Compact design is ideal for testing on densely-

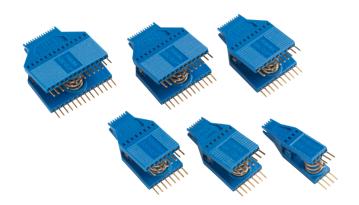
populated boards.

Lead Pitch: 0.050in (1.27mm).

| → | $ \leftarrow$ B $\rightarrow$ |
|---|-------------------------------|
| 2 | Fig. 3                        |
|   | Fig. 3:                       |

New 32-, 40- and 44-pin SOIC/SOJ test clip is a new design of the spring-loaded clip that features double-row .025 wire wrap pins for easy connection to ribbon cable. This clip will fit all SOIC/SOJ chips between 0.30in (7.62mm) and 0.60in (15.24mm) width.

| Model# | No.<br>Leads | Lower<br>Width (A) | Body Widths                                | Top Width<br>(B)     | Typical Applications                                       | Fig. |
|--------|--------------|--------------------|--|----------------------|--|------|
| 5250   | 8            | 0.26in<br>(6.60mm) | 0.15in to 0.3in<br>(3.81mm to 7.62mm)      | 0.430in<br>(10.92mm) | Analog Devices AD834JR,<br>Triquint TQ9122N                | 1    |
| 5251   | 14           | 0.410<br>(10.41mm) | 0.15in to 0.3in<br>(3.81mm to 7.62mm)      | 0.755in<br>(19.18mm) | Motorola HCT08A, Philips<br>74HC125                        | 1    |
| 5252   | 16           | 0.460<br>(11.68mm) | 0.15in to 0.3in<br>(3.81mm to 7.62mm)      | 0.830in<br>(21.08mm) | Maxim MAX791, Microlinear<br>ML6509, AMD 26LS31            | 1    |
| 5253   | 20           | 0.560<br>(14.22mm) |  |                      | Linear Tech. LT1130, Maxim<br>MX7226, Motorola HCT373A     | 1    |
| 5254   | 24           | 0.660<br>(16.76mm) | 0.15in to 0.3in<br>(3.81mm to 7.62mm)      | 1.230in<br>(31.24mm) | Altera EP610APC, Linear Tech.<br>LT1130, Motorola MC22V10S | 1    |
| 5437   | 28           | 0.760<br>(19.30mm) |  |                      | Texas Inst. SN74F32D, Altera<br>EPM5032, Raytheon TMC1171  | 1    |
| 6107   | 32           | 0.870<br>(22.10mm) |  |                      | Toshiba TMPN3120, Hitachi<br>HM628128, NEC D431000AGW      | 3    |
| 6108   | 40           | 1.070<br>(27.18mm) | 0.30in to 0.60in<br>(7.62mm to<br>15.24mm) | 1.070in<br>(27.18mm) | _  | 3    |
| 5514   | _            | _                  | _  | _                    | SOIC Clip® Test Kit contains 1<br>each 8 - 28 pin clips    |      |



## Static Control Products



Working with static sensitive devices? Pomona enables you to work with confidence when using our static control accessories. Whether you choose to purchase our selection of grounding systems or build your own ESD set-up, Pomona gives you a variety of individual accessories. Our accessories also make a perfect addition to our Test Companion Kits.



#### Model# 6088

Provides a larger working area than Model 6087. This kit provides a staticsafe 24in x 24in (609.6mm x 609.6mm) laminated red vinyl mat. The mat includes a 10mm snap socket and two 8in x 11in (203.2mm x 279.4mm) pockets. Carry those often used tools right with the mat. A common point ground connector with two Banana Plug Jacks and a 15ft (4.5m) ground lead. An adjustable elastic wrist strap and a resistive coil cord complete the kit. Folds down to fit into your tool box.

## **Wrist Strap Tester**





work area with Velcro® strips (supplied) or, using an integral button 10mm snap stud, attached directly to your staticsafe work mat. Powered by a 120 Vac wall adapter (supplied), the tester has a "Power on" indicator. It is practical for both a quick test or as a continuous ground point connection. UL listed.

Touch Type On-Demand Tester and Common Point Ground



#### Model# 6087

A complete and durable service kit for static sensitive work. Features a staticsafe 18in x 22in (460mm x 558.8mm) laminated red vinyl mat. The kit includes a mat with two 0.39in (10mm) snap sockets, common point ground connector with two Banana Plug Jacks and a 15ft (4.5m) ground lead, an adjustable elastic wrist strap and a resistive coil cord. Folds down to fit into your tool kit.

## **Antistatic Ground Cord**

#### Model# 5534

This patch cord features a molded-in 1 Megohm resistor at the snap end. The 5534 has a straight banana plug. Nominal extended length is 72in (183cm).

## Model# 6088 and 6087

Mat Color: Red.

Thickness: 0.018in (0.46mm). Surface Resistivity:  $108 \text{ to } 109\Omega/\text{Sq}$ . Volume Resistivity:  $109\Omega$  cm.

Static Decay: 0.01sec 5000V to 0V



## **Ring Terminal**



#### Model# 5531

Attach this terminal to table or cabinet to create a banana jack for grounding wrist strap. Screw hole accepts up to #10 screw.

#### Stacking Snap Banana Jack



#### Model# 5532

Attach this jack to either banana snap stud (male) or banana snap socket (female). It allows multiple attachment to the same grounding point. Snap is 3/8in (9.52mm)

Material: High conductivity copper with tin plated finish.



## **Static Control Products**

### **Adjustable Elastic** Wrist Strap



#### Model# 6081

An adjustable, one size fits all, wrist strap. The wristband features a dual stainless steel cam that securely locks the plastic band, but allows easy adjustment without tools. The washable fabric band has silver impregnated nylon threads knitted into its inner surfaces. Only non-allergenic stainless steel and silver touch the skin. Standard 4mm snap stud allows attachment to resistive coil cords (Pomona modles 5534 and 6085). Wrist circumference: 2.5in (64mm) to 13in (330mm).(183cm).

#### **Wrist Straps**



| Model# | Size       | Circumference – Min.            |
|--------|------------|---------------------------------|
| 6083   | Adjustable | 5.5in (139mm)<br>13in (330.2mm) |

Made of non-allergenic stainless steel, each link has a 0.08in (2mm) PVF film laminated on top for electrical insulation. Quick and easy adjustment without tools, the wrist strap will fit most users. A standard 0.16in (4mm) snap stud allows attachment to resistive coil cords.

Material: Band: Stainless steel/PVF Insulation.

Cover: Thermoplastic.

Wrist Circumference: 5.5in to 13.0in

(139.7mm x 330.2mm). Width: 0.63in (16.0mm).

## **Adjustable Metal Wrist** Strap Kit

#### Model# 6084

Complete wrist strap kit features the adjustable metal wrist strap. Also included: Resistive Coil Cord (1M  $\!\Omega$ resistor molded in) extendable to 6ft (1.8m) with a Straight Banana Plug and Alligator Clip.



## **Adjustable Elastic Wrist** Strap Kit



#### Model# 6082

A complete wrist strap kit features adjustable elastic wrist strap. Also included: Resistive Coil Cord (1M $\Omega$ resistor molded in) extendable to 6ft (1.8m) with a Straight Banana Plug and Alligator Clip.



## **Telecom Products**



Accuracy and repeatability—Pomona connects to the telecom industry with an impressive selection of test accessories. Ideal for network testing, troubleshooting, leave-in-the-line patching, or system prototyping, Pomona Electronics' traditional reliability adds up to the quality connection telecom professionals demand.

#### True 75 $\Omega$ BNC Male Cable



| Model#      | Length      |
|-------------|-------------|
| 6510-V-12-0 | 12in (0.3m) |
| 6510-V-24-0 | 24in (0.6m) |
| 6510-V-36-0 | 36in (0.9m) |
| 6510-V-48-0 | 48in (1.2m) |
| 6510-V-60-0 | 60in(1.5m)  |
| 6510-V-72-0 | 72in (1.8m) |

BNC connectors are perfectly matched to  $75\Omega$  impedance for superior VSWR and return loss performance.

Ideal for digital video and telecommunication applications.

**Cable Type:** High Flex, Multi-strandcenter conductor, RG59 Type, Black.

## True 75 $\Omega$ BNC Cable (Transmit/Receive)



| Model#      | Length      | Color |
|-------------|-------------|-------|
| 6510-V-72-2 | 72in (1.8m) | Red   |
| 6510-V-72-6 | 72in (1.8m) | Blue  |

Cable and Strain Relief are color coded red and blue for easy identification of transmit and receive lines.

**Cable Type:** High Flex, Multi-strand center conductor, RG59 Type.

## 75Ω BNC Male to Mini-WECO (440) Connector Cable



| Model#  | Length      |
|---------|-------------|
| 6515-96 | 96in (2.4m) |

Cable Type: RG59 Type.

### Piercing Clip Styles for Test Leads and Patch Cords

## Bed of Nails/Single Needle

Small wire and single penetration of heavier wire.



### **Bed of Nails**

Small wire penetration.



Ratings: The components in this section have a hands free rating for use in controlled voltage environments. However, for CE compliance these products are not intended for hand held use at voltages above 33 Vrms/70 Vdc.



## **Telecom Products**

#### **Piercing Clips to Sheathed Banana Test Leads**



| Model#     | Clip Type                            | Length      |
|------------|--------------------------------------|-------------|
| 6483-48-02 | Bed of Nails<br>and Single<br>Needle | 48in (1.2m) |

Pierces 19 to 26 AWG Wire.

Wire: 18 AWG Silicone Test Lead Wire. For use with DMM's from Fluke, Wavetek (Meterman), Amprobe, Greenlee and others.

\*Colors: -02 includes both

Black and Red.

#### **Two Single Bantam Plugs** to RJ48/RJ45 Connectors



| Model#  | Length      |
|---------|-------------|
| 6320-96 | 96in (2.4m) |

Bantam Plug: Nickel-plated brass.

Rating: Maximum voltage for hands free use: 300 Vrrms.

Cable Type: 2 and 4 Conductor Shielded Twisted Pair. Bantam "Y" (Tx and Rx) to RJ48 modular plug.

Pin out: 1-Ring, 2-Tip, 4-Ring,

#### **Bantam Plug to Two Alligator Clips**



| Model#  | Length      |
|---------|-------------|
| 5026-36 | 36in (0.9m) |
| 5026-60 | 60in (1.5m) |

**Bantam Plug:** 5026: Unplated brass. 5026N: Nickel-plated brass.

Rating: Maximum voltage for hands free use: 150 Vrms, +122°F (+50°C) max.

Cable Type: 2 Conductor Shielded Microphone, 0.180in (4.57) O.D.

## **Bantam Plug Patch Cord**



| Model#  | Length      |
|---------|-------------|
| 4279-12 | 12in (0.3m) |
| 4279-24 | 24in (0.6m) |
| 4279-36 | 36in (0.9m) |
| 4279-48 | 48in (1.2m) |
| 4279-60 | 60in (1.5m) |
| 4279-72 | 72in (1.8m) |

#### Bantam Plug:

4279: Unplated brass. 4279N: Nickel-plated brass.

Rating: Maximum voltage for hands free use: 300 Vrms: 300 Vrms\*, +122°F (+50°C) max.

Cable Type: 2 Conductor Shielded Twisted Pair, 0.180in (4.57mm) O.D.

### **Bantam Plug to Double** Banana Plug, Balanced Line



| Model#  | Length      |
|---------|-------------|
| 4281-60 | 60in (1.5m) |

Bantam Plug: Unplated brass.

Rating: Maximum voltage for hands free use: 500V Peak, +131°F

(+55°C) max.

Cable Type: 2 Conductor Shielded Microphone, 0.180in (4.57mm) O.D.

## **WE310 Plug to Two Alligator Clips**



| Model#     | Length      |
|------------|-------------|
| 3352N-A-60 | 60in (1.5m) |

#### WE310 Plug:

3352: Unplated brass. 3352N: Nickel-plated brass.

Rating: Maximum voltage for hands free use: 150 Vrms., +122°F (+50°C) max.

Cable Type: 2 Conductor Twisted Pair, 0.250in (6.35mm) O.D.

## **BNC Female to Bantam Phone Plug**



#### Model# 4719

Rating: Maximum voltage for hands free use: 500V Peak, +122°F (+50°C) max.

Convert Bantam style jacks to BNC.

## **Category Index**



Page#

| Category  | Page#  |
|---|--|
| Adanters  |  |
| Adapters  Adapter Accessories Adapter Kit, Coaxial Cable Banana Jack and Plug [see separate Banana Plugs & Jacks sect Banana to Connector Pin and Socket. Banana to Pin Tip. BNC Dust Cap BNC to 1/4in Phone Plug BNC to 3.5mm Plug BNC to Banana Plug. BNC to Banana Plug. BNC to Banana Plug. BNC to Binding Post BNC to BNC 18 BNC to F. BNC to Mini Phone Plug BNC to N BNC to Phone Plug BNC to Triax. BNC to TNC BNC to TNC BNC to Triax. BNC to UHF Coaxial Adapters and Kits Coaxial Connectors and Adapters F to F N to N Oscilloscope Probe Tip Phone Plug 1/4in to Banana Plug |  |
| Phone Plug to Banana Plug   | 42<br>32<br>-18, 28<br>16, 22<br>28<br>37<br>60-71<br>17, 30<br>25<br>25, 29<br>18, 29 |
| Alligator Clips, Regular Size   | 00 75  |
| To Banana Jack Breakout to BNC  | -14, 16<br>. 69, 75<br>. 49-53   |
| Alligator Clips, Mini  To 2mm Banana Jack Breakout to BNC Patch Cord to Banana, double Patch Cord to Banana, single Patch Cord to Mini Alligator Clip   | 16   |
| Attenuators BNC Attenuator  | 20   |
| Audio Audio   |  |
| Automotive Automotive Backprobe Pin Connector Test Probe Connector Test Socket Lead Holder Piercing Probes Test Pins and Sockets  | 84<br>84<br>84<br>84<br>84   |

| Category Page                                 |
|---|
| Banana Plugs and Jacks (Binding Posts too)    |
| Banana Jack Mounting Base                     |
| Banana Jack, panel mount with wire wrap 36, 4 |
| Banana Jack to Banana Jack                    |
| Banana Jack to Miniature Banana Plug 4        |
| Banana Jack Miniature Panel Mount             |
| Banana Jack Panel Mount                       |
| Banana Miniature Plug Panel Mount 39-4        |
| Banana Miniature Plug Shorting Bar            |
| Banana Plug Panel Mount                       |
|   |
| Banana Plugs and Jacks                        |
| Banana Shorting Bar                           |
| Binding Post                                  |
| Binding Post, Double                          |
| Binding Post Miniature                        |
| Binding Post Mounting Base                    |
| Binding Post Shorting Bar                     |
| Binding Post, Spring Loaded 35, 3             |
| Binding Post to Banana Plug 4                 |
| Connector Test Probe                          |
| Connector Test Socket4                        |
| Coupler                                       |
| Double Banana Plugs                           |
| Double Banana Jacks, Panel Mount              |
| Low Thermal                                   |
| Miniature Banana Jack                         |
| Miniature Banana Plug                         |
| Nut Hay                                       |
| Nut, Hex                                      |
| Pin Tip Jack Panel Mount                      |
| Safety Banana Jack to Banana Plug adapter 3   |
| Safety Banana, Jacks                          |
| Safety Banana, panel mount                    |
| Safety Banana Plugs 32-33, 3                  |
| Safety Banana Plug, right angle               |
| Safety Banana Plug, stackable                 |
| Solderless Banana Plug, double                |
| Solderless Banana Plug, single                |
| Solderless Banana Plug, triple                |
| Solderless Mini Banana Plug, double 4         |
| Solderless Mini Banana Plug, single 4         |
| Solderless Mini Banana Plug, triple 3         |
| Spade Lug                                     |
| Stackable Banana Plug, double                 |
| Stackable Banana Plug, single                 |
| Stackable Banana Plug, triple                 |
|   |
| Stackable Binding Post, double                |
| Stackable Mini Banana Plug, double 4          |
| Stackable Mini Banana Plug, single 4          |
| Stackable Mini Banana Plug, triple            |
| Test Pins and Sockets                         |
| Triple Banana Plugs3                          |
| Triple Banana Jacks, panel mount3             |
| Boxes and Enclosures                          |
| Boxes and Enclosures                          |
|   |
| Box, Aluminum                                 |
| Box, Plastic5                                 |
| Breakouts                                     |
| Assemblies and Breakouts                      |
| BNC to Alligator Clips 13-14, 1               |
| BNC to Banana Plug                            |
|   |
| BNC to Pin Tip                                |
| BNC to Spade lugs                             |
| BNC to Square Jack                            |
| BNC to Test Clips                             |
| BNC to Wire Lead1                             |
| Broadcast                                     |
| BNC Terminator                                |
|   |
|   |
|   |

| Cable Assemblies                     |     |
|--------------------------------------|-----|
| Assemblies and Breakouts7-           |     |
| Banana Miniature Plug                | 16  |
| BNC to Alligator Clips               | 16  |
| BNC to BNC                           | 89  |
| BNC to Pin Tip                       | 16  |
| BNC to SMA                           |     |
| BNC to Spade lugs                    |     |
| BNC to Square Jack                   | 16  |
| BNC to Wire Lead                     | 16  |
| Coaxial Cable Set                    | 84  |
| Lead Holder                          |     |
| N to NSMA to "N"                     | 10  |
| SMA to SMA 9-                        | 12  |
| Triax to Alligator Clips             | 13  |
| Triax to Triax                       |     |
| Calibration Accessory Kit            |     |
| Assemblies and Breakouts             | 54  |
| Connectors                           |     |
| Banana Plugs and Jacks [see separate |     |
| Banana Plugs and Jacks section] 31-  | 44  |
| Binding Post [see Banana Plugs and   |     |
| Jacks section]                       | 39  |
| BNC 75 $\Omega$                      | 22  |
| Hermetically Sealed                  | 22  |
| BNC Plugs, Jacks                     | 30  |
| BNC. Hermetically Sealed             | 22  |
| BNC, Isolated, Bulkhead Receptacle   | 22  |
| BNC Panel                            |     |
| BNC Strain Relief Boot               |     |
| F Plugs, Jacks 23, 82-               | -83 |
| F Panel                              |     |
| F to BNC                             | 28  |
| MCX Plugs, Jacks                     |     |
| MMCX PCB                             | 25  |
| Grabber Type Clips                   | 79  |
| N Coaxial                            |     |
| N Panel                              |     |
| N Terminator                         | 20  |
| SMA Panel                            | 26  |
| SMA PCB                              |     |
| SMB Plugs, Jacks                     | 27  |
| SMB PCB                              |     |
| TNC Triax Plugs, Jacks 24-           | 30  |
|                                      | 20  |
| DC Blocking                          |     |
| BNC Blocking Capacitor               | 20  |
|                                      |     |

Category



## **Category Index**

| Category Page#  |
|---|
| DMM Accessories   |
| 0.04", 0.06" & 0.08" Replaceable Probe Tips 70 Alligator Clips  |
| Couplers  |
| Kelvin Clips with Leads       .71         Kelvin Probe Set       .71         Piercing Probes       .62-63, 66, 69, 84         Pogo Tip Probes       .65, 70         Probe Tip Adapter       .69, 84         Probe Tips, Spring-Loaded       .65, 70 |
| Probe Tips, Replacable  |
| Test Clips  |
| Test Probe SMD Tweezers.         70           Test Probe Tip Adapters         69, 84           Test Probe with Leads.         65-67, 71           Test Probe, Modular         68  |
| Wire Piercing Test Clip   |
| IC Test Clips and Adapter 85-86   |
| Kelvin Clips Kelvin Probes, Clips with Leads71  |
| Oscilloscope Probes   |
| Probes       65, 80-81         Probes Accessory Kit       65, 80-81         Probes and Accessories       65, 80-81         SMD       76-81         SMD Adapter       76-81  |

| Category   | Page#            |
|--|------------------|
|  |                  |
| atch Cords   |                  |
| Alligator to AlligatorBanana Jack to Banana Plug               | 52               |
| Banana Jack to Banana Plug                                     | 45, 53           |
| Banana Jack to Minigrabber                                     |                  |
| Banana Jack, Sheathed to Minigrabber .                         |                  |
| Banana Jack to Test Clip                                       |                  |
| Banana PlugBanana Plug to Micrograbber                         | 45-53            |
| Banana Plug Miniature  |                  |
| Banana Plug to Minigrabber                                     | 46-47 52         |
| Banana Plug to Alligator Clip                                  | 49 51            |
| Banana Plug to Square Pin Jack                                 | 53               |
| Banana Plug to Test Clip                                       | 46-48, 52        |
| Banana Plug, Miniature to Standard                             | 46               |
| Bantam   | 90               |
| Bantam to Alligator  | 90               |
| Bantam to Banana Plug  | 90               |
| Bantam to RJ45 / RJ48  |                  |
| BNC 75<br>BNC to Alligator Clip                                | . 8, 10, 89      |
| BNC to Alligator Clip  | 13-14, 10        |
| BNC to BNC   | 7-0              |
| BNC to Grabbers and Pincers                                    | 13-14 16         |
| BNC to Bantam  | 90               |
| BNC to SMA   |                  |
| Coax   | 7-18             |
| CoaxDouble Shielded Coax, Triaxial                             | 13               |
| Lead Holder  | . 7, 45, 84      |
| Low Thermal  |                  |
| Patch Cords and Test Leads                                     | 45-53, 68        |
| Patch Cord to Banana, Double<br>Patch Cord to Banana, Single45 | 47-49            |
| Patch Cord to Spade Lug  | -40, 52-55<br>50 |
| Patch Cord to Triaxial   | 13               |
| Pin Tip  | 43               |
| Retractable Sheath Banana                                      | 50. 52           |
| Sheathed Banana Jack to Minigrabber                            | 46               |
| Shielded, Double Banana  | 47-49            |
| Shielded Twisted Pair, Triaxial                                | 13               |
| SMA  | 9-12             |
| SMD Test Clip 48,  |                  |
| Spade Lug  |                  |
| Spade Lug to Alligator   |                  |
| Square Pin to Banana   | 50<br>50         |
| Test Clip  | 49 51-52         |
| Triaxial   |                  |
| Twisted Pair   |                  |
| Type N   |                  |
| WE310  |                  |
| WE310 to Alligator   | 90               |

| Category   | Page#                                  |
|--|--|
| Shorting Cap  BNC Shorting Cap SMA Shorting Cap Static Control   | 20<br>23                               |
| Kit Patch Cord Static Control Tester Wrist Strap.  | . 87-88<br>. 87-88<br>87               |
| Telecom  Bantam. Bantam to Alligator Bantam to Banana Plug Bantam to RJ45/RJ48 BNC to Bantam BNC to WECO Patch Cords Piercing Alligator Clips to Banana Plug WE310 WE310 to Alligator. WECO. Telecom | 90<br>90<br>90<br>89<br>90<br>90<br>90 |
| Terminators BNC Terminator   |  |
| Test Clins   |  |
| Banana Jack Pin Tip Solder Type Grabbers and Test Clips. 66 Kelvin Clips with Leads Pin Tip to Alligator Clip SMD.   | 74<br>. 74-75<br>5, 74-79<br>71        |
| Test Leads   |  |
| Patch Cords and Test Leads 45-53   | , 60-68                                |
| Test Probes Test Probes SMD Tweezers   |  |
| Video  | 00.00                                  |
| Video  | . 82-83                                |
| Wire   | 71                                     |





| Model# Page#                   | Model# Page#         | Model# Page#        | Model# Page#       | Model# Page#           | Model# Page#               |
|--------------------------------|----------------------|---------------------|--------------------|------------------------|----------------------------|
| AL-B                           | 2391 55              | 3286 29             | 3901               | 4654 39                | 5114 86                    |
| B                              | 2392 55<br>2393 55   | 3287 29<br>3288 29  | 3916A 86<br>3925   | 4655 59<br>4656 59     | 5133 70<br>5142-K 70       |
| CK73041 54                     | 2397 55              | 329619              | 3957               | 4661 25                | 5142-K 70                  |
| HB 45                          | 2398 55              | 3301 58             | 3966               | 468420                 | 5144 66                    |
| MDP                            | 2399 55              | 3302 58             | 4005               | 4690 44                | 5145 32                    |
| MDP-S 31                       | 2400 55              | 330658              | 4022               | 4691 44                | 5148 22                    |
| MDP-ST 31<br>MDP-X 31          | 2401 55<br>2417 56   | 3311 58<br>3316 58  | 4043 82<br>4044 83 | 4702 53<br>4719 90     | 5155 14, 30<br>5156 14. 30 |
| MG-B                           | 2428 56              | 3352N-A 90          | 4054 29, 82        | 4713                   | 5157 14, 30                |
| P53                            | 2439 40              | 3364                | 4108 20            | 4725                   | 5165 44                    |
| 1081 53                        | 2440                 | 3430 19             | 4115 38            | 4741 53                | 5167 34                    |
| 1166                           | 2447 22              | 3452                | 4119 20            | 4742 55                | 5168 34                    |
| 1167                           | 2447A 22<br>2451 22  | 3533                | 4159 22<br>4160 22 | 4768-K 47<br>4770 38   | 5169 34<br>5170 34         |
| 122506A                        | 2451A 22             | 3535                | 4176               | 4771 53                | 5173                       |
| 1269                           | 2455 24              | 3542                | 4226               | 4773                   | 5178 25                    |
| 1270                           | 2630 16              | 3548                | 4233               | 4777-C 13              | 5186 57                    |
| 1286 43                        | 2631                 | 3560 44             | 4240 20            | 4777-K 13              | 5187-C                     |
| 1296                           | 2708 7, 45<br>2854   | 3561 44<br>3562 44  | 4243               | 4787 23<br>4788 22     | 5187-K                     |
| 1325 33                        | 2864 46              | 356344              | 4246 56            | 4826                   | 5189                       |
| 1326-A 48                      | 288616               | 3564 44             | 4247 58            | 4846-BB9               | 5203 59                    |
| 1326-C 48                      | 2894 43              | 3565 44             | 4248 56            | 4846-C 9               | 5218 25                    |
| 1330                           | 2901 56              | 3580                | 4276-C 9           | 4846-X 9               | 5219                       |
| 1330-ST 48                     | 2902                 | 3600                | 4279 90<br>4281 90 | 4846-UU                | 5220                       |
| 1383-C 9                       | 2944 40              | 360257              | 4282 23            | 4864 55, 56, 59        | 5230                       |
| 1432 43                        | 2945 40              | 360357              | 4284 23            | 4892                   | 5233 36                    |
| 1440 45                        | 2948 45              | 360657              | 4285 23            | 4896                   | 5243                       |
| 1442 83                        | 2970                 | 3690                | 4286 23<br>4288 28 | 4897                   | 5250 86                    |
| 1452                           | 2BA                  | 3719 56<br>3728 55  | 4288 28<br>4289 28 | 4898                   | 5251 86<br>5252 86         |
| 1469                           | 2BC 48               | 3742 58             | 4290 28            | 4900                   | 5253 86                    |
| 1508 7, 45                     | 2BC-AL               | 3743 58             | 4291 28            | 4903 59                | 5254 86                    |
| 1581                           | 2BC-PP 49            | 3744A 44            | 4292 28            | 4911A                  | 5255 59                    |
| 1614A 69<br>1658-T 10          | 3014 46<br>3027-K 49 | 3750                | 4293 28<br>4294 28 | 4914 31, 33<br>4933 33 | 5266-C 8<br>5268-C 15      |
| 1693 50                        | 3030 40              | 3751 55<br>3752 55  | 4294 28            | 4934 33                | 5279 85                    |
| 1756 50                        | 3073                 | 3753 55             | 4296 28            | 4935-BB                | 5280 85                    |
| 1809                           | 3220                 | 3754 55             | 4297 28            | 4945-K 15              | 5281 85                    |
| 1823 32                        | 3221                 | 3760                | 4298 28            | 4956                   | 5285                       |
| 1825 33<br>1829 32             | 3230 56              | 3770                | 4299 28<br>4388    | 4964-SS                | 5286                       |
| 1894                           | 3231 56<br>3232 56   | 3777A 44<br>3778 22 | 4391 20            | 4970                   | 5290 50                    |
| 1960 53                        | 3234 56              | 3780 49             | 4408 7, 45         | 4979 22                | 5295 50                    |
| 2035 40                        | 3239 56              | 3781 49             | 4408M 84           | 4986 33                | 5297 20                    |
| 2138 43                        | 3257                 | 3782 46             | 448821             | 4995                   | 5298 29                    |
| 2142                           | 3258 34<br>3261 34   | 3786-C 47<br>3788   | 4513               | 5014 86<br>5018 38     | 5299 29<br>5300 29         |
| 2239-C 48                      | 3263 34              | 3789                | 4528-X             | 5026 90                | 5301 51                    |
| 2240                           | 3264 34              | 383443              | 4530-C 15          | 5051                   | 5302 48                    |
| 2244 38                        | 3265 34              | 3837 29, 82         | 4531-C 13          | 5053 46                | 5304-K 14                  |
| 2247-K 49                      | 3266                 | 383920              | 4532-C             | 5054                   | 5305                       |
| 2249-C 7, 8<br>2249-K 8        | 3267                 | 3840 20<br>3841     | 4543               | 5056                   | 5307                       |
| 2249-E 8                       | 3269                 | 384224              | 4578 22            | 5066                   | 5312 85                    |
| 2249-Y 8                       | 3271 40              | 384324              | 4590 39            | 506830                 | 5319 29, 82                |
| 2269                           | 3272 40              | 384429              | 4601               | 506916                 | 5325A61                    |
| 2305 44                        | 3276 39              | 3846                | 4613               | 5076 30                | 534213                     |
| 2352 55, 56, 57, 58<br>2382 40 | 3277                 | 3847                | 4614 39<br>4619 39 | 5085 20<br>5088 23     | 5343-C                     |
| 2383 41                        | 3284                 | 386239              | 4650               | 5089                   | 5401 85                    |
| 2390 55                        | 3285                 | 386339              | 4653 39            | 509029                 | 5402 85                    |
|                                |                      |                     |                    |                        |                            |



## **Model Number Index**

| Model# Page#         | Model# Page#           | Model# Page#        | Model# Page#             | Model# Page#               | Model# Page#     |
|----------------------|------------------------|---------------------|--------------------------|----------------------------|------------------|
| 5405 43<br>5406 33   | 6042B                  | 6496 80<br>6497 80  | 72903 77<br>72904 77     | 72996 27<br>72997 27       | 730995<br>731015 |
| 5418                 | 6082                   | 6498                | 72905                    | 7299827                    | 73103 5          |
| 5423-C 13            | 608388                 | 6499 80             | 7290677                  | 72999 27                   | 73104 5          |
| 5437 86              | 6084 88                | 6500 80             | 72907 78                 | 73000 27                   | 73105 5          |
| 5510                 | 608687                 | 6510-V 8, 89        | 72908 15                 | 73004 25                   | 73106 5          |
| 5511                 | 6087                   | 6515 89<br>6530A 62 | 72909 15<br>72912 36     | 73012 25<br>73014 25       |                  |
| 5514 86              | 6107 86                | 6534                | 72913 36                 | 73028 25                   |                  |
| 5515A 85             | 6108 86                | 6545 33             | 72914 19, 79             | 73037 25                   |                  |
| 5519A 67             | 6146 66                | 6546                | 72917                    | 73040 80, 81               |                  |
| 5520                 | 6147 66<br>6172A 65    | 6547 39<br>6548 39  | 72918 34<br>72919 78     | 73041 54<br>73042 21       |                  |
| 5522                 | 6173A 64               | 6549 39             | 72920 78                 | 73043 21                   |                  |
| 5523 49              | 6203 69                | 6551                | 72921 79                 | 73044 24                   |                  |
| 5525 51              | 6204A62                | 6553 74, 80, 81     | 72922 79                 | 73045 24                   |                  |
| 5531                 | 6212                   | 6554                | 72923 78                 | 7304623                    |                  |
| 5532                 | 6232A                  | 6567                | 72924 75, 79<br>72925 78 | 73047 23<br>73048 24       |                  |
| 5543B61              | 6244                   | 6601 66             | 72926-C 8                | 73049 24                   |                  |
| 5672A61              | 6245 47                | 6700                | 72927-C 15               | 73050 24                   |                  |
| 5673B63              | 6248 46                | 6701                | 72928 76                 | 73051 24                   |                  |
| 5674C                | 6249 46<br>6252 69     | 6705                | 72929 78<br>72930 36     | 73052 24<br>73053 30       |                  |
| 5677B60<br>5678-K70  | 6254                   | 6713 23, 83         | 72930 17                 | 73054 30                   |                  |
| 568269               | 6262 69, 84            | 6717 22             | 72932 18                 | 7305630                    |                  |
| 5689A68              | 6264B69                | 6718 22             | 72934 17                 | 73057 30                   |                  |
| 5697                 | 6275 65                | 6721                | 72935 76                 | 73061 21                   |                  |
| 5698                 | 6283-C 47<br>6286 68   | 6723 66<br>6727 45  | 72936 78<br>72937 19     | 73062 24<br>73063-BB 10    |                  |
| 5700                 | 630371                 | 6728 32             | 72938 19                 | 73064-BB 11                |                  |
| 5701                 | 6320 90                | 6729 32, 71         | 72940 81                 | 73065-BB 12                |                  |
| 5733 85              | 6340 60                | 6730                | 72941 81                 | 73066-BB 12                |                  |
| 5748                 | 6341 65<br>6342 65     | 6733                | 72942 65, 81<br>72943 26 | 73067-BB 11<br>73068-BB 12 |                  |
| 5788                 | 634361                 | 6735 22             | 7294526                  | 73069-BB 11                |                  |
| 5790                 | 6344 61                | 6736 22             | 72946 26                 | 73070-BB 12                |                  |
| 5830                 | 6351                   | 6737                | 72953 26                 | 73070-C                    |                  |
| 5898                 | 6352                   | 6738                | 72954 26<br>72956 26     | 73071-BB 11<br>73071-X 11  |                  |
| 5900A64              | 6354 65, 70            | 6740                | 72959 26                 | 73072-BB 11                |                  |
| 5901B62              | 6356                   | 6741 22             | 72960 26                 | 73072-VV                   |                  |
| 5903A63              | 6357 51                | 6744                | 72961 26                 | 73073-BB 11                |                  |
| 5904A                | 6358 68                | 6745 22             | 72962 26                 | 73075-VV                   |                  |
| 5906A                | 6364                   | 6747 22<br>6748 22  | 72963 26<br>72964 26     | 73075-UU 11<br>73077-UU 10 |                  |
| 5908A68              | 6366                   | 6752A21             | 7296626                  | 73078-UU 12                |                  |
| 5909A68              | 6383 33, 71            | 6754                | 72967 26                 | 73082-X 12                 |                  |
| 5910B 66<br>5911B 66 | 6384 33, 71            | 6779 28             | 72968 26                 | 73083-BB 12<br>73083-X 12  |                  |
| 5912B 66             | 6387 36<br>6389 39     | 6780 28<br>6781 28  | 72969 26<br>72970 26     | 7308437                    |                  |
| 5913 66, 84          | 6405 69, 84            | 6782 28             | 72971 26                 | 7308537                    |                  |
| 5914 69              | 6411 84                | 6802 23, 82         | 72973 26                 | 73086 37                   |                  |
| 5916B 69, 75         | 6413 69, 84            | 6878 83             | 72974 26                 | 73087 48                   |                  |
| 5931                 | 6440 39<br>6441 39     | 6880 83<br>6881 83  | 72975 23<br>72976 28     | 73088 37<br>7519A 67       |                  |
| 5935 43              | 644279                 | 6883                | 72977 28                 | 73090 35                   |                  |
| 5936 43              | 6479 68                | 6884                | 72978 28                 | 73091 35                   |                  |
| 5940                 | 6481 44, 84            | 7035                | 72979 28                 | 73092 35                   |                  |
| 5948 53<br>5952A 66  | 6483 52, 90<br>6491 80 | 7040                | 72981 27<br>72984 27     | 73093 35<br>73094          |                  |
| 5953A                | 649380                 | 7159 82             | 72988 27                 | 730955                     |                  |
| 5955 66              | 649480                 | 7160 82             | 72992 27                 | 730965                     |                  |
| 6041B 69, 75         | 6495 80                | 7290277             | 72995 27                 | 73098 5                    |                  |

## Many ways to find answers



You can quickly find complete product specifications and discover Pomona's newest product announcements when you visit our website:

#### www.pomonaelectronics.com

There are several ways for you to find the product you are looking for.

## 1 Search by keywords or model #

On the upper right-hand column of our homepage, enter the description of the product or model number of the Pomona product in the [Search] field and hit [ENTER].

## Search by product categories

From the homepage, highlight [Products] on the upper left to see a drop down menu. You will see a list of available product categories you can choose from. If you are unable to find the product you are looking for, visit our Support page for help with technical support, what's new, application articles, custom product requests, or download a digital copy of our full line catalog.

## Search by selection tool

Our Selection Tool is available to help you find the right product for your specific tools, whether you're using a Clamp Meter, Digital Multimeter, or Oscilloscope. Search by tool type, brand and model.

## 4 Where To Buy

Our Where To Buy page lists all authorized Pomona distributors by location and name. Distributor website links and phone numbers are listed, allowing you to get in touch with the distributor of your choice.

## **5** Distributor inventory search

Once you have the Pomona model number you are looking for, you can find distributors with available stock on hand. On our Where To Buy page, select Distributor Inventory Search on the left, and enter the model number into the search. You will be presented with a list of distributors and their available stock. This list is also displayed on our individual product pages.

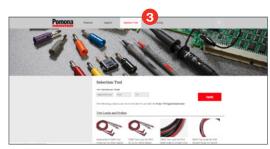
## 6 Technical support

#### techsupport@pomonatest.com

Because technical questions about products or applications can arise almost anywhere, Pomona offers technical support with a qualified resource via e-mail or visiting the Pomona website. While you are in the Technical Support section of our website, you can also refer to selector guides, view or request a catalog, or go directly to the specific product information you seek.





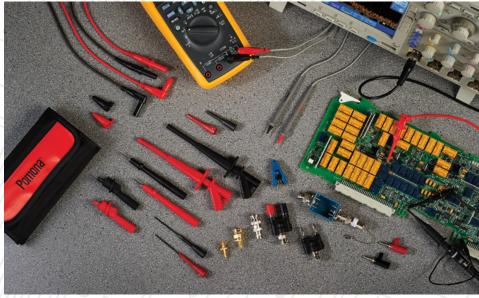






Nothing in this catalog is to be construed as an offer. Product availability, prices and delivery dates are subject to Pomona's order confirmation form. The same applies to orders based on development samples delivered. Pomona products are intended to be used in accordance with the specifications in this catalog. Any use or application that deviates from those specifications may be dangerous. A limited warranty applies to Pomona products. Pomona will not be liable for any loss, damage, cost of repair, or incidental or consequential damages of any kind, arising in connection with the design, manufacture, sale, or repair of the products, whether based on express or implied contract, negligence or strict liability. Pomona will not be liable to buyer for any amount exceeding the purchase price of the product which proves to be defective. Pomona will not be responsible or liable for any patent infringements or other rights of third parties, which may result from the use of this catalog. Registered trademarks used in this catalog are the property of their respective companies.





Follow us on:

Facebook f www.facebook.com/pomona.electronics/

Instagram 🧿 www.instagram.com/pomona.electronics/

YouTube www.youtube.com/user/pomona.electronics

## In the United States:

Pomona Electronics 9028 Evergreen Way Everett, WA 98204 United States

## www.pomonaelectronics.com

Tel: 1-800-490-2361 Fax: 1-425-446-5844

## In Europe:

Pomona Electronics P.O.Box 1186 5602 BD Eindhoven The Netherlands

### www.Pomona.cc europe@pomona.cc

Tel: +31 (0) 40 2675 150 Fax: +31 (0) 40 2675 151

#### All other areas:

www.pomonaelectronics.com

Tel: 1-425-446-5500 Fax: 1-425-446-5844

## Products in this catalog are available through:

©2019 Pomona Electronics. All other product and company names are trademarks or registered trademarks of their respective companies. Specifications subject to change without notice.

All rights reserved. Printed in the U.S.A. 10/2019 2074413g-en Volume 55



## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Test Leads category:

Click to view products by Pomona manufacturer:

Other Similar products are found below:

795-2384-10-25 1301430020 15107 1510-24-105 15308 15408 15302 15307 15407 15409 BU-1149-A-36-0 BU-1481-E-12-0 BU-1481-E-24-0 1927617 2450 2524-A-60 LB1F-2R-RED LB1F-2R-YLW 2500 2524-A-48 2977-J-48 R948131000 380200 BU-1449-E-12-2 BU-1480-E-24-0 BU-1481-E-12-2 BU-1481-E-24-2 LB1F-2R-BLK LB1F-2R-BLUE LB1F-2R-WHT 6345 6432 EM3782-24-3# R948161002 R948160002 R948170002 R948171002 R948163002 973604100 934160101 934160100 R948174000 CT3269 CT3258 CT3158-100 HSPL 8568/AWG16/200/RT HSPL 8568/AWG16/200/SW 28.0119-10020 28.0127-05025 28.0127-20025