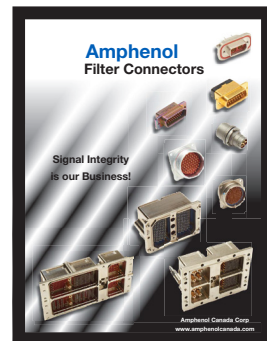


# Amphenol CANADA

MILITARY & AEROSPACE



Filter Connectors Catalog



Rectangular Catalog



Multi-Modular ARINC

Visit <http://www.amphenolcanada.com/media> for literature, product data sheets, videos and Patents



R27 Catalog



ARINC 600 Catalog



ARINC 404 Catalog

AMPHENOL CORPORATION  
605 Milner Ave, Toronto, ON M1B 5X6 • 416-291-4401  
[www.amphenolcanada.com](http://www.amphenolcanada.com)

# MICRO-D CONNECTORS

MICRO-MINIATURE MILITARY AND COMMERCIAL INTERCONNECTS



Engineered Solutions  
Designed to Fit

**Amphenol CANADA**  
MILITARY & AEROSPACE

For more than 50 years, Amphenol Canada Corp., a subsidiary of Amphenol Corporation, has been an international leader in the manufacture of rectangular and filtered connectors.

We design, manufacture and test EMI / EMP filter and non-filter connectors, which are used worldwide in military, aerospace, and commercial applications. As part of Amphenol Corporation, we have the advantage of access to technologies and processes of Amphenol's worldwide facilities. Our expertise in understanding and supporting our customers' interconnect needs has earned us a reputation of excellence among the world's leading users of electronic components.



### CUSTOMER SERVICE

At Amphenol Canada, customer service is a solid commitment from all our employees. Our product managers, application engineers, product specialists, and sales representatives are able to answer your questions and assist you in choosing the right connectors for your applications.

Using Amphenol's on-line computer system, we are able to promptly update you on your order status, provide you with price and delivery quotations, and address any problems or questions you might have. Whether you need standard or custom designed connectors, our marketing department is your liaison with Amphenol Canada's engineering, quality and manufacturing experts.

### QUALITY & RELIABILITY

Certified to AS9100D and ISO 9001:2015

Amphenol Canada's broad base of customers and the high levels of technology in which they are involved make it essential that Amphenol's own products are of the highest quality and reliability.

Please contact us for RoHS requirements.

### ENGINEERING

Amphenol Canada provides innovative designs to help our customers solve a variety of EMI / EMP and/or allowable space problems.

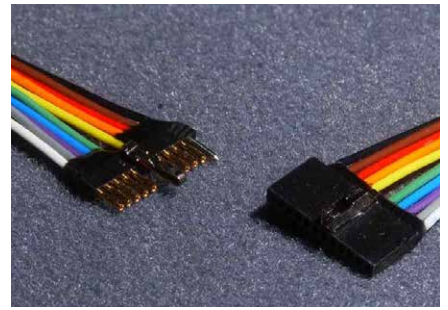
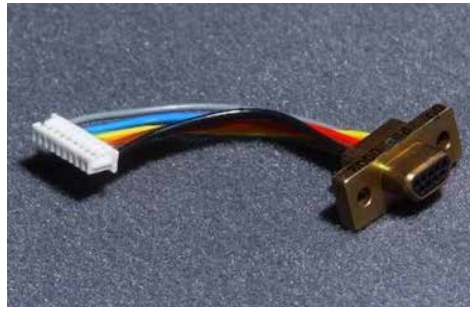
The engineering department is fully equipped with 3-D CAD modeling, state-of-the-art electrical test equipment and environmental test chambers; enabling ongoing research and development that contributes to our design solutions of tomorrow.

### MANUFACTURING CAPABILITIES

- CNC machining of connector shells and hardware
- Screw machining of contacts
- Stamping (including progressive dies) of shells, contacts and ground plates
- Plating with electroless nickel, cadmium, OD cadmium and other special plating
- Injection molding of thermoset, thermoplastic and rubber
- Tool room equipped to manufacture and maintain tools, dies and moulds
- Final assembly shop equipped with special purpose assembly machinery, equipment and tools, and electrical test equipment
- Model shop for design concept evaluation and prototyping
- Quick reaction facility for speedy manufacturing of pre-production quantities





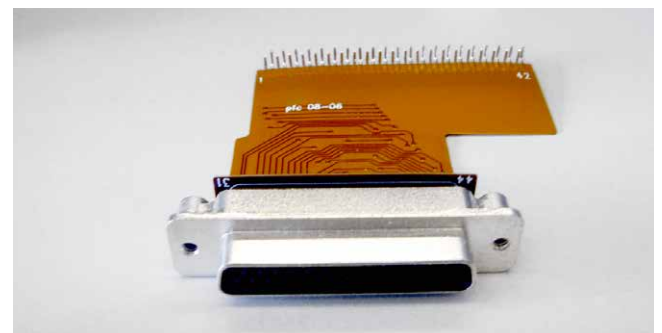
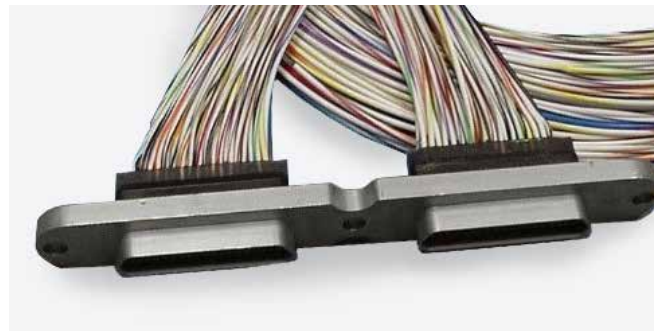


## ENGINEERED SOLUTIONS. DESIGNED TO FIT.

Amphenol micro connectors provide small inter-connect solutions, which will exceed the requirements of the US military standard M83513. What differentiates Amphenol from the competition is our overall connector design. Custom solutions can easily be engineered to ensure exact performance in any application.

Amphenol is not limited to the traditional M83513 rectangular connectors but has also developed and produced circular connectors, strip line connectors, PC board connectors, and hybrid connectors utilizing power, signal, coaxial and fiber optics contacts.

MICRO-D



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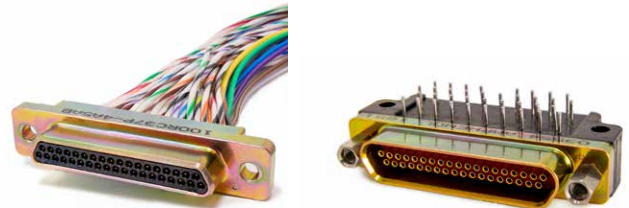
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### Wired

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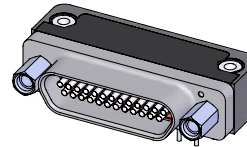
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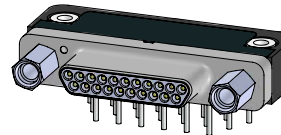
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## Amphenol Precision Stamped and Formed Contacts at a Glance

- AMPHENOL DESIGN is not like other stamped and formed designs
- FULLY QUALIFIED per MIL-DTL-83513 requirements
- ONE PIECE CONTACT with EQUALLY SPACED compliant tines
- GOLD OVER NICKEL versus gold over copper flash barrier
- TIGHTER CONTROL over plating process
- UNIFORM PLATING thickness
- AUTOMATED STAMPING versus twist process variations
- Integrated closed engaging end ENSURES UNIFORM INSERTION FORCES
- LOW MATING/UNMATING FORCE
- PREFERRED CONTACT for SPACE and SATELLITE applications
- CONTINUOUS CONNECTION along the length of the contact beam (line contact) versus multi-point connection (point contact)



**3 TYNE COMPRESSION**



**Au/Ni BARRIER  
(UNIFORM PLATING THICKNESS)**

# MICRO-D SPECIFICATIONS

The Amphenol microminiature connector series are designed and manufactured to meet or exceed Mil-DTL-83513. We offer proven military specification performance and reliability in rectangular and strip line connectors, available in rectangular D, strip, and custom card edge configurations. Inserts with signal and coax/power contacts are also available.

The Amphenol microminiature contact system employs a precision stamped and formed pin contact recessed within the plug insulator. The socket contact is a precision fabricated tube. Pin and socket contacts are epoxy retained in high grade thermoplastic insulators. In addition, beryllium copper gold over nickel plated contacts assures the highest quality for mating and de-mating as well as very low contact resistance. The contacts are set at .050" center to center lines which yields 4 times the density of the D-sub.

The contact system has proven reliability, exceeding the performance specifications of MIL-DTL-83513.

Variety of terminations (solder cup, terminated to wire harness, and board mount configurations), shells (plastic and metal) in a broad range of shell finishes, mounting hardware (jack screw, posts, guide pins), and back-shells (straight and angled) are available to be tailored to your needs.

## MICROMINIATURE CONNECTOR

The following data applies to a standard Amphenol Canada micro-d connector with wires or PCB termination. Variations from standard products may cause performance to vary from that mentioned below. Consult factory for special applications and requirements.

MICRO-D

SPECIFICATIONS		
Shell Material	(100, 106, 107, 108, 110, 115, 116, 119 & M13 series)	Aluminum alloy 6061-T6 per QQ-A-200/8
	104 Series:	Stainless steel
	Std. Plastic (101, 102 & 105 Series):	Polyphenylene sulfide (Ryton)
	High Temp Plastic:	High performance thermoplastic (PEEK or equivalent)
Shell Finish (Metal Shell Only)	Anodized (Black), Zinc Nickel (Black Chromate), Cadmium (Yellow Chromate), Olive Drab Cadmium, Chem Film, Electroless Nickel, Gold, Zinc Nickel-48 HRS, Pure Electro-Deposited Aluminum, Nickel Teflon	
Insulator / PCB Backshell	Polyphenylene sulfide (Ryton) per MIL-M-24519, type GST-40F; colour: black	
Contacts	Copper alloy, 50 micro-inches gold plate over nickel	
Hardware	Stainless steel, passivated	
Potting Material	Std. Epoxy:	EP1730-1 or equivalent; colour: black
	High Temp Epoxy:	EP173859 or equivalent
Wire	Insulated Wire:	MIL-W-16878/4 or /6 (available 7 or 19 strands) MIL-W-22759/11 or /33
	Solid Uninsulated Wire:	Copper per A-A-59551 (QQ-W-343)
Coupling	Friction or Jackscrews into jackposts/threaded Inserts	
Contact Spacing	.050 (1.27) centers	
Shell Styles (Gender)	Plug (pin contacts) and receptacle (socket contacts)	
Number of Contacts	Standard Micro-d:	9, 15, 21, 25, 31, 37, 51, 69, 100
	Combo (Hybrid) Micro-d:	7W2 or 7C2 (5 signal, 2 power/coax) 24W4 or 24C4 (20 signal, 4 power/coax)
	High Density Connector (106 Series):	50, 54, 58, 62, 66, 70, 74, 104, 112, 120, 128, 136, 144, 152
	Strip Connector (105 Series):	1 thru 30 (no guide pins) 1 thru 29 (guide pin on one end) 1 thru 28 (guide pin on both ends)
	Coaxial Cable	RG-178/U others available upon request
Wire Size	#24 thru #32 AWG (largest to smallest diameter)	
Contact Termination	Multiple indent crimp	

Contact Amphenol Canada for more information at 416-291-4401 • [www.amphenolcanada.com](http://www.amphenolcanada.com)  
Download 2D drawings & 3D models using our online configurator.



**MICROMINIATURE CONNECTOR PERFORMANCE DATA**

The following data applies to a standard Amphenol Canada micro-d connector that is in accordance with M83513 spec. Variations from standard products may cause performance to vary from that mentioned below. Consult factory for special applications and requirements.

TEST DESCRIPTION	SPECIFICATION/ METHOD *	LIMITS
Contact Rating		3 amps max.
Magnetic Permeability	ASTM-A342/A342M	2.0 μ max.
D.W.V. (Test voltage rms 60 Hz ac volts)	EIA-364-20	at sea level: 600 vac for solder pot and standard wire (Test voltage rms 60 Hz ac volts) at 70,000 ft altitude (reduced barometric pressure): 150 Vac for solder pot and standard wire
Insulation Resistance	EIA-364-21	5000 megohms min.
Contact Resistance	EIA-364-23	8 milliohms at 3 amps
Contact Engagement Force	MIL-DTL-83513	6.0 oz. max.
Contact Separation Force	MIL-DTL-83513	0.5 oz. min.
Connector Mating Force	MIL-DTL-83513	(10 oz. times no. of contacts) max.
Connector Unmating Force	MIL-DTL-83513	(0.5 oz. times no. of contacts) min.
Thermal Shock (Temperature Cycling)	EIA-364-32, condition I, 5 cycles	No physical damage -55°C to +125°C (-67°F to +257°F)
Mechanical Shock (Specified Pulse)	EIA-364-27, condition E	No physical damage and no loosening of parts No loss of continuity > 1 micro-sec.
Vibration	EIA-364-28, condition IV	No physical damage and no loosening of parts No loss of continuity > 1 micro-sec.
Durability	MIL-DTL-83513	500 mating cycles at a rate of 200 ±100 CPH
Salt Spray (Corrosion)	EIA-364-26, condition B	Meets mateability and contact resistance requirements
Fluid Immersion	MIL-DTL-83513	Meets mateability requirements
Humidity	EIA-364-31	Meets D.W.V. and insulation resistance requirements 1 megohm min. after step 6, 1000 megohms min. after 24 hrs of conditioning
Insert Retention (class M)	MIL-DTL-83513	50 lbs psi (axial load)
Solderability	MIL-STD-202, method 208	Withstand test condition
Contact Retention E	IA-364-29	5 lbs min. (axial load)
Thermal Vacuum Outgassing (Space Classes)	SP-R-0022 or ASTM E595	Exceeds MIL-DTL-83513 requirements; standard is 1.0% (Space Classes) max TML and 0.1% max VCM of original mass

\* Standards References

MIL = Department of Defense

ASTM = ASTM International

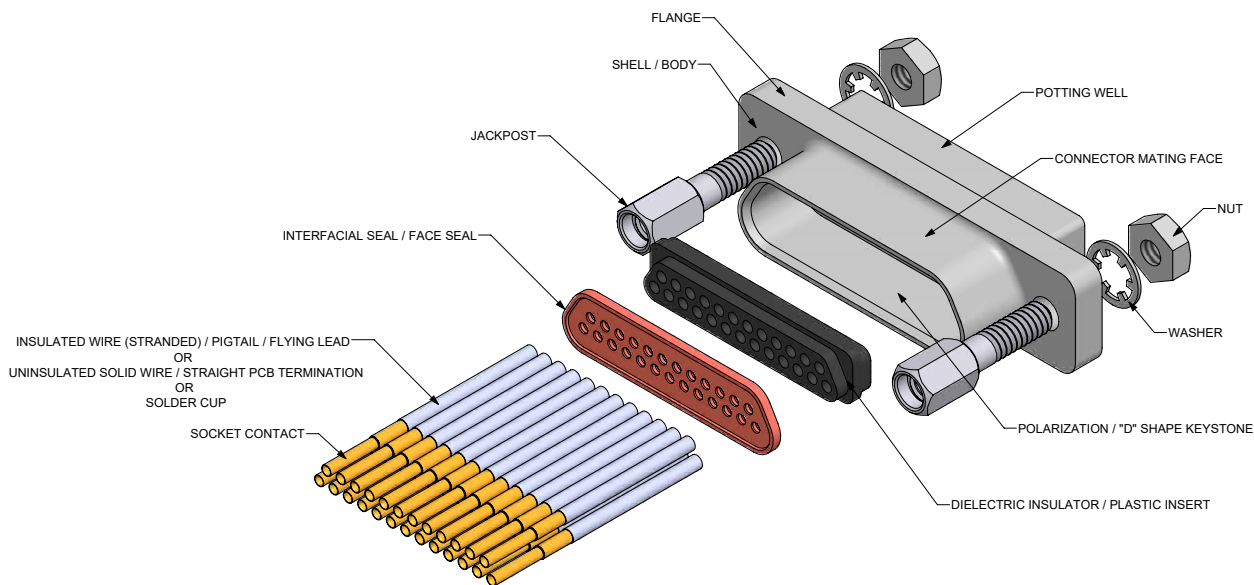
EIA = Electronic Industries Association

SP = NASA

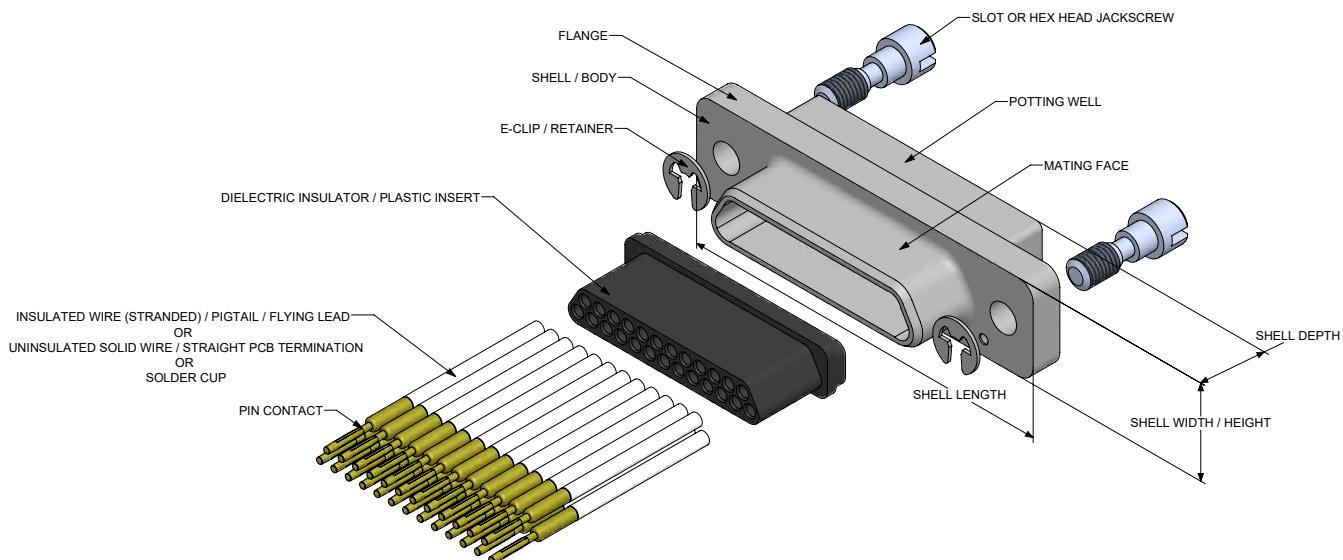
\*\* Does not apply for die-cast parts  
(consult factory before ordering)

## Detailed View of Micro-D Connectors

### RECEPTACLE/ FEMALE / SOCKET CONNECTOR

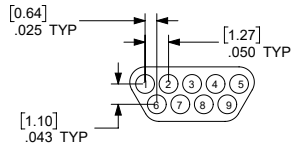


### PLUG / MALE / PIN CONNECTOR



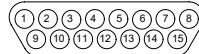
MICRO-D

**PIN**

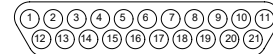


**SOCKET**

9 CONTACTS

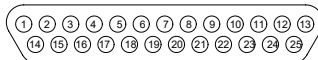


15 CONTACTS

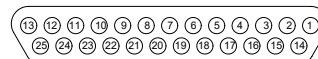


21 CONTACTS

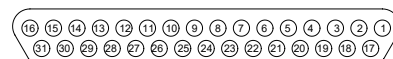
**PIN**



**SOCKET**

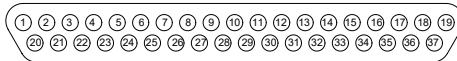


25 CONTACTS



31 CONTACTS

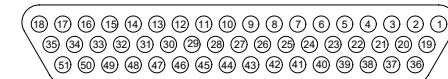
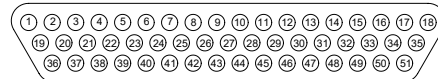
**PIN**



**SOCKET**

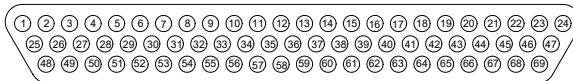


37 CONTACTS

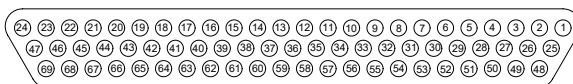


51 CONTACTS

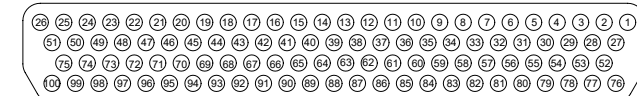
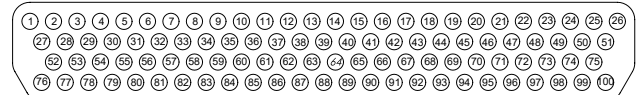
**PIN**



**SOCKET**

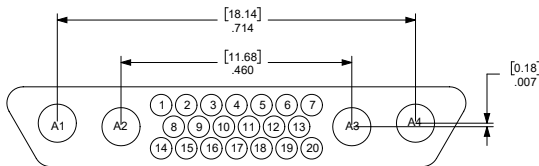


69 CONTACTS

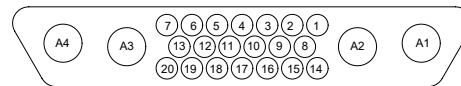


100 CONTACTS

## 24W4 / 24P4 : 4 COAX/POWER + 20 SIGNAL CONTACTS IN A 51 WAY MICRO-D SHELL

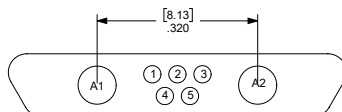


**PIN**

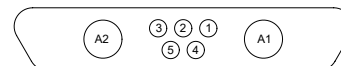


**SOCKET**

## 7W2 / 7P2 : 2 COAX/POWER + 5 SIGNAL CONTACTS IN A 25 WAY MICRO-D SHELL



**PIN**



**SOCKET**

Cavity identification numbers are for reference only and does not appear on the connector. Coax and power contacts are not to MIL-spec.



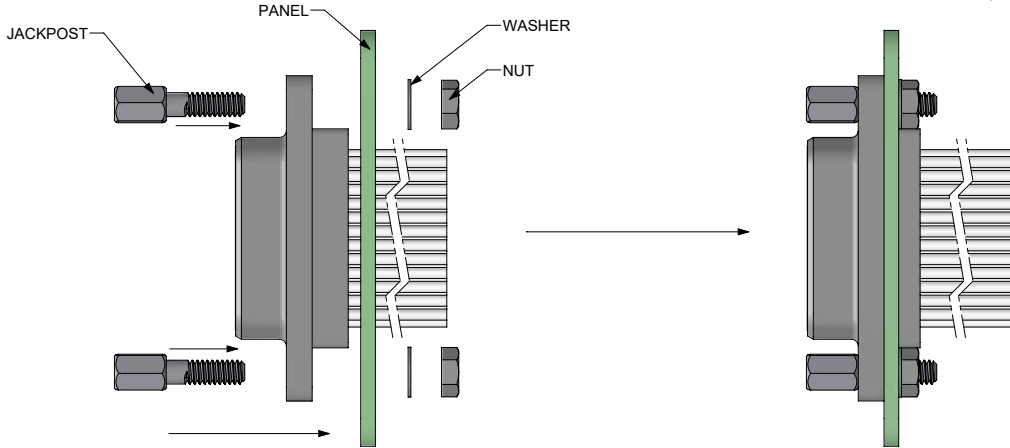
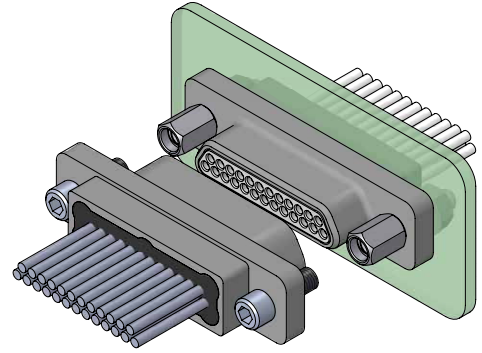
# FRONT & REAR PANEL MOUNTING GUIDE

## FRONT PANEL MOUNTING

Available in two different hardware sizes:

- #2-56 / M2 for size 9-69
- #4-40 / M3 for size 100.

Please see page 90 for hardware details



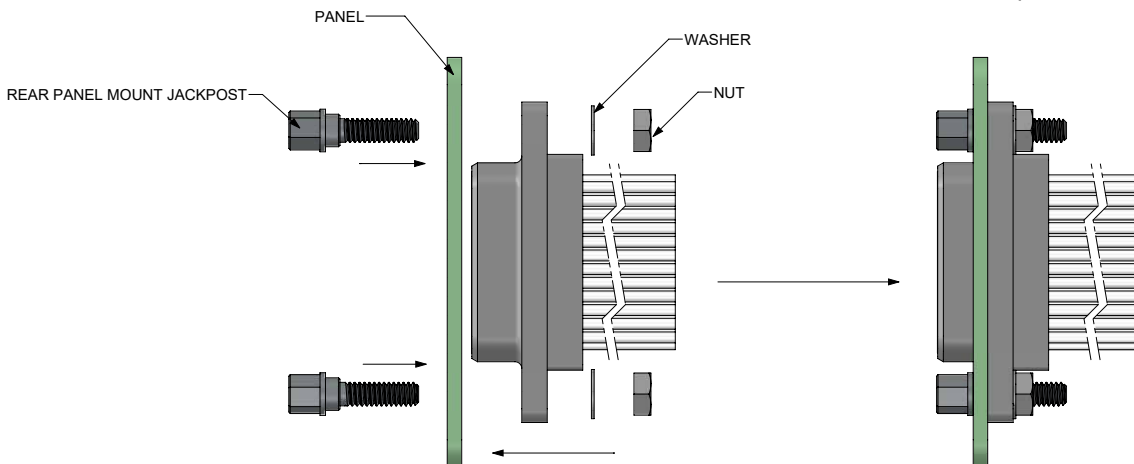
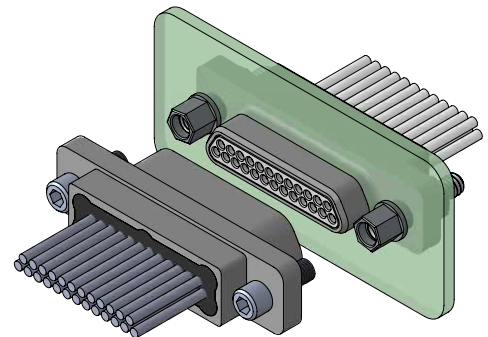
MICRO-D

## REAR PANEL MOUNTING

Available in two different hardware sizes:

- #2-56 / M2 for size 9-69
- #4-40 / M3 for size 100.

Please see page 90 for hardware details



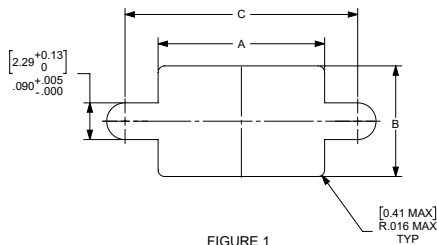


FIGURE 1  
SIZE 9-69 FRONT MOUNTING

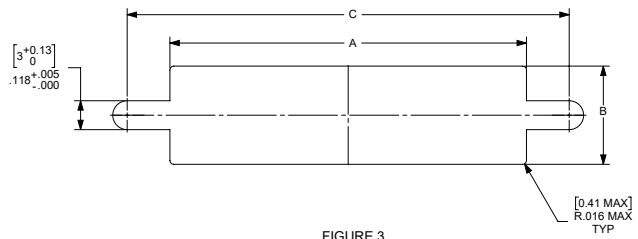


FIGURE 3  
SIZE 100 FRONT MOUNTING

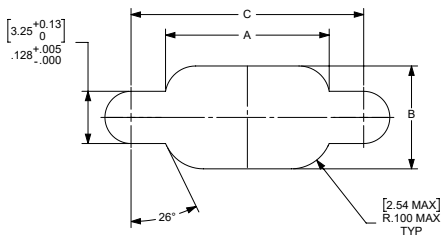


FIGURE 2  
SIZE 9-69 REAR MOUNTING

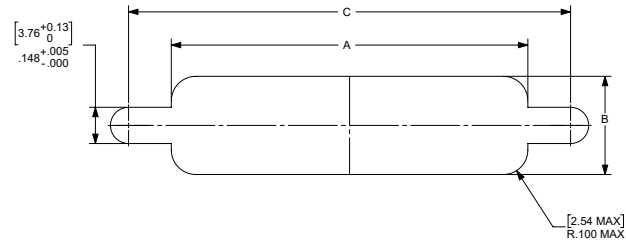


FIGURE 4  
SIZE 100 REAR MOUNTING

Dimensions are in inch (mm)

SIZE	FIGURE	A +.004 (0.10) -.000 (0.00)	B +.004 (0.10) -.000 (0.00)	C +.005 (0.13) -.000 (0.00)
9	1	.404 (10.26)	.274 (6.96)	.570 (14.48)
	2	.408 (10.36)	.258 (6.55)	
15	1	.554 (14.07)	.274 (6.96)	.720 (18.29)
	2	.559 (14.20)	.258 (6.55)	
21	1	.704 (17.88)	.274 (6.96)	.870 (22.10)
	2	.709 (18.00)	.258 (6.55)	
25	1	.804 (20.42)	.274 (6.96)	.970 (24.64)
	2	.809 (20.55)	.258 (6.55)	
31	1	.954 (24.23)	.274 (6.96)	1.120 (28.45)
	2	.959 (24.36)	.258 (6.55)	
37	1	1.104 (28.04)	.274 (6.96)	1.270 (32.26)
	2	1.109 (28.17)	.258 (6.55)	
51	1	1.054 (26.77)	.315 (8.00)	1.220 (30.99)
	2	1.059 (26.90)	.301 (7.64)	
69	1	1.354 (34.39)	.315 (8.00)	1.520 (38.62)
	2	1.358 (34.49)	.301 (7.64)	
100	3	1.446 (36.73)	.364 (9.25)	1.805 (45.85)
	4	1.459 (37.06)	.406 (10.31)	

## Series 101 Only

SIZE	FIGURE	A +.004 (0.10) -.000 (0.00)	B +.004 (0.10) -.000 (0.00)	C +.005 (0.13) -.000 (0.00)
9	1	.412 (10.46)	.177 (4.50)	.570 (14.48)
	2	.385 (9.78)	.223 (5.66)	
15	1	.562 (14.27)	.177 (4.50)	.720 (18.29)
	2	.535 (13.59)	.223 (5.66)	
21	1	.712 (18.08)	.177 (4.50)	.870 (22.10)
	2	.685 (17.40)	.223 (5.66)	
25	1	.812 (20.62)	.177 (4.50)	.970 (26.64)
	2	.785 (19.94)	.223 (5.66)	
31	1	.962 (24.43)	.177 (4.50)	1.120 (28.45)
	2	.935 (23.75)	.223 (5.66)	
37	1	1.112 (28.24)	.177 (4.50)	1.270 (32.26)
	2	1.085 (27.56)	.223 (5.66)	
51	1	1.062 (26.97)	.225 (5.71)	1.220 (30.99)
	2	1.035 (26.29)	.265 (6.73)	

Sizes 69 & 100 are not applicable for 101 series plastic connectors.

### Notes:

Shell sizes 9-69 front mounting (Figure 1) and rear mounting (Figure 2) cutouts accommodate #2-56 screws.

Shell size 100 front mounting (Figure 3) and rear mounting (Figure 4) cutouts accommodate #4-40 screws.

# MICRO-D HARNESSSED CONNECTORS

SERIES 100, 102, & 104

QUALIFIED TO M83513/01 THRU /04

## How To Order:

### FEATURES:

- Supplied pre-wired and fully potted
- Plastic and metal shells are intermateable and intermountable.
- Metal shells to provide RFI/EMI shielding

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
RoHS Compliance	Connector Series	Insulator Material	Shell Finish	Connector Size	Connector Type	Wire Size (AWG)	Wire Type	Wire Color/Finish	Wire Length	Hardware	Non Standard Length Code
	100	R	N	25	P-	4	A	5	F	P-	48

MICRO-D

### 1. RoHS Compliance

<b>E</b>	RoHS Compliant
	Blank for Non-ROHS

### 2. Connector Series

<b>100</b>	Metal Shell Per M83513
<b>102</b>	Plastic Shell (Dimensionally Identical to Metal Shell Per M83513)
<b>104</b>	Stainless Steel (Dimensionally identical to metal shell per M83513)

### 3. Insulator Material

<b>R</b>	Polyphenylene Sulfide (Ryton)
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### 4. Shell Finish

	Omit for series 102 & 104
<b>A</b>	Anodized (Black)
<b>B</b>	Zinc Nickel (Black Chromate)
<b>C</b>	Cadmium (Yellow Chromate)
<b>D</b>	Olive Drab Cadmium
<b>F</b>	Chem Film
<b>N</b>	Electroless Nickel
<b>G</b>	Gold
<b>K</b>	Zinc Nickel - 48 Hrs
<b>L</b>	Pure Electro-Deposited Aluminum
<b>T</b>	Nickel Teflon

### 5. Connector Size (Number of contacts)

<b>09</b>
<b>15</b>
<b>21</b>
<b>25</b>
<b>31</b>
<b>37</b>
<b>51</b>
<b>69</b>
<b>100</b>

All sizes I.A.W M83513 except size 69 (non-military)

### 6. Connector Type

<b>P-</b>	Plug
<b>S-</b>	Receptacle
<b>G-</b>	Plug with Ground Spring

### 7. Wire Size (AWG)

	Omit for Solder Cup
<b>1</b>	32
<b>2</b>	30
<b>3</b>	28
<b>4</b>	26 (M83513) *Off Shelf
<b>5</b>	25 (Solid Wire Only)
<b>6</b>	24
<b>7</b>	Special 24 AWG Solder Cup (Omit Steps 8-10)

### 8. Wire Type

	Omit for Solder Cup
<b>GENERAL APPLICATIONS:</b>	
<b>A</b>	7 Strd. per NEMA-HP3 (MIL-W-16878/4)
<b>B</b>	7 Strd. per NEMA-HP3 (Formerly MIL-W-16878/6)
<b>C</b>	19 Strd. Per NEMA-HP3 (MIL-W-16878/4)
<b>D</b>	19 Strd. Per NEMA-HP3 (MIL-W-16878/6)
<b>MILITARY/AEROSPACE:</b>	
<b>E</b>	Per MIL-W-22759/11 (M83513 Standard)
<b>F</b>	Per MIL-W-22759/33 (Space Grade)
<b>L</b>	Solid Wire Uninsulated
<b>G</b>	04035-26A

### 9. Wire Color / Finish

	Omit for Solder Cup
<b>1</b>	All White (M83513 STD) *Off Shelf
<b>2</b>	All Yellow
<b>3</b>	Solid Wire Uninsulated, Tin Plated
<b>4</b>	Solid Wire Uninsulated, Gold Plated
<b>5</b>	Color coded per Mil-STD-681, System 1
<b>6</b>	1st 10 Colors black thru white, repeated (M83513 STD) Off shelf
<b>7</b>	1st 15 colors black thru white/Yellow Repeated (Size 21+ Only)
<b>8</b>	Twisted Pairs, White/Blue
<b>9</b>	Twisted Pairs, White/Blue, Marked

### 10. Wire Length (Inches)

	Omit for Solder Cup
<b>A</b>	18.00 (+1.00/-0.00)
<b>B</b>	36.00 (+1.00/-0.00)
<b>C</b>	72.00 (+1.00/-0.00)
<b>D</b>	.500 (Solid Wire Only +0.20/-0.00)
<b>E</b>	1.00 (Solid Wire Only +0.20/-0.00)
<b>F</b>	Non-Standard Length



### How To Order:

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
RoHS Compliance	Connector Series	Insulator Material	Shell Finish	Connector Size	Connector Type	Wire Size (AWG)	Wire Type	Wire Color/ Finish	Wire Length	Hardware	Non Standard Length Code
	100	R	N	25	P-	4	A	5	F	P-	48

11. Hardware (Pre-Installed by Factory)	
<b>B-</b>	Standard Mounting Holes
<b>H-</b>	Threaded Mounting Hole #2-56 (Size 9-69), #4-40 (Size 100)
<b>D-</b>	Metric Threaded Mounting Hole M2 (Size 9-96), M3 (Size 100)
<b>P-</b>	Jackpost
<b>PA-</b>	Hex Head Rear Panel Mount Jackpost for .027"-.037" (.68mm - .94mm) Panel Thickness
<b>PB-</b>	Hex Head RPM for .042" - .052" (1.06mm - 1.32mm) Panel Thickness
<b>PC-</b>	Hex Head RPM for .057"- .067" (1.45mm-1.70mm) Panel Thickness
<b>PD-</b>	Hex Head RPM for .088" - .098" (2.24mm-2.49mm) Panel Thickness
<b>PE-</b>	Hex Head RPM for .075"- .085" (1.91mm-2.16mm) Panel Thickness
<b>PF-</b>	Hex Head RPM for .120" - .130" (1.91mm-2.16mm) Panel Thickness
<b>PG-</b>	Hex Head RPM for .067"- .077" (1.70mm-1.96mm) Panel Thickness
<b>SA-</b>	Slot Head Rear Panel Mount Jackpost for .027"-.037" (.68mm-.94mm) Panel Thickness

11. Hardware (Pre-Installed by Factory)	
<b>SB-</b>	Slot Head RPM for .042"-.052" (1.06mm-1.32mm) Panel Thickness
<b>SC-</b>	Slot Head RPM for .057" - .067" (1.45mm-1.70mm) Panel Thickness
<b>SD-</b>	Slot Head RPM for .088" - .098" (2.24mm-2.49mm) Panel Thickness
<b>SE-</b>	Slot Head RPM for .075" - .085" (1.91mm-2.16mm) Panel Thickness
<b>SF-</b>	Slot Head RPM for .120" - .130" (3.05mm-3.30mm) Panel Thickness
<b>SG-</b>	Slot Head RPM for .067" - .077" (1.70mm-1.96mm) Panel Thickness
<b>M2-</b>	Low Profile Jackscrew, Allen Head
<b>M3-</b>	High Profile Jackscrew, Allen Head
<b>M5-</b>	Low Profile Jackscrew, Slot Head
<b>M6-</b>	High Profile Jackscrew, Slot Head
<b>L-</b>	Captive Low Profile Jackscrew
<b>K-</b>	Captive High Profile Jackscrew
<b>F-</b>	Forward Float Mount
<b>R-</b>	Reverse Float Mount

12. Non Standard Length Code (inches)	
Stranded Wire	1=1.00", 100=100.00"
Solid Wire (0.109" < Length < 1.00")	110=.110", 999=.999"

# MICRO-D HARNESSSED CONNECTORS

SERIES 100, 102, & 104

QUALIFIED TO M83513/01 THRU /04

## How to Order M83513

### SOLDER CUP TERMINATION:

1.	2.	3.	4.
Connector Series	Specification Sheet	Insert Arrangement	Shell Finish
M83513/	01-	H	C

1. Connector Series		2. Specification Sheet		3. Insert Arrangement		4. Shell Finish	
<b>M83513/</b>	M83513	<b>01-</b>	Plug (Pin)	<b>A</b>	9	<b>C</b>	Cadmium
		<b>02-</b>	Receptacles (Socket)	<b>B</b>	15	<b>N</b>	Electroless Nickel
				<b>C</b>	21	<b>P</b>	Passivated Stainless Steel
				<b>D</b>	25		
				<b>E</b>	31		
				<b>F</b>	37		
				<b>G</b>	51		
				<b>H</b>	100		

MICRO-D

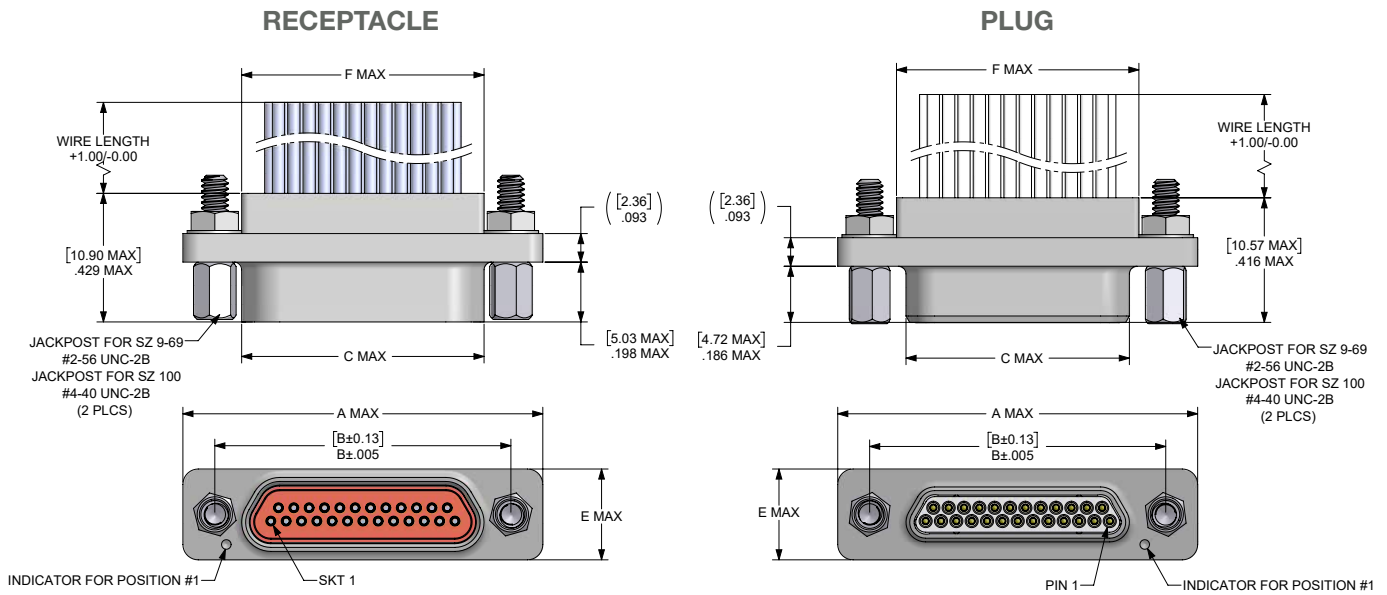
### CRIMP TERMINATION:

1.	2.	3.	4.	5.
Connector Series	Specification Sheet	Insert Arrangement	Wire Type (Inches +1.00/-0.00)	Shell Finish
M83513/	03-	D	01	N

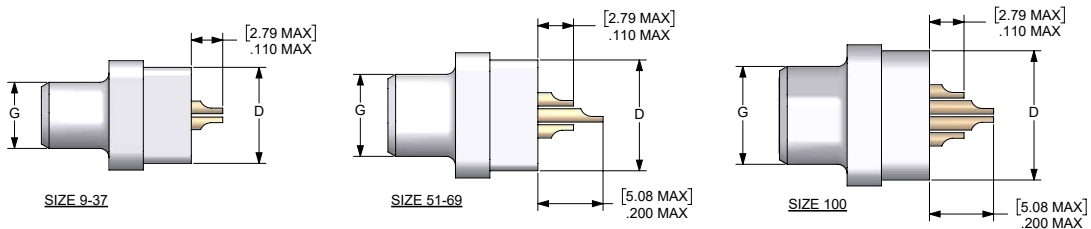
1. Connector Series		4. Wire Type *(Inches +1.00/-0.00)		4. Wire Type *(Inches +1.00/-0.00)		5. Shell Finish	
<b>M83513/</b>	M83513	<b>01</b>	M22759/11-26-9, 18"	<b>10</b>	M22759/33-26-9, 36"	<b>C</b>	Cadmium
<b>2. Specification Sheet</b>		<b>02</b>	M22759/11-26-9, 36"	<b>11</b>	M22759/33-26-(*), 18"	<b>N</b>	Electroless Nickel
<b>03-</b>	Plug (Pin)	<b>03</b>	M22759/11-26-(*) ,18"	<b>12</b>	M22759/33-26-(*) , 36"	<b>P</b>	Passivated Stainless Steel
<b>04-</b>	Receptacles (Socket)	<b>04</b>	M22759/11-26-(*) ,36"	<b>13</b>	M22759/11-26-9, 72"		
<b>3. Insert Arrangement</b>		<b>05</b>	A-A-59551, Type S, 25 AWG, except shall be gold plated 10 micro-inches; 0.5"	<b>14</b>	M22759/11-26-(*) , 72"		
<b>A</b>	9	<b>06</b>	A-A-59551, TYPE S, 25 AWG, except shall be gold plated 10 micro-inches; 1.0"	<b>15</b>	M22759/33-26-9, 72"		
<b>B</b>	15	<b>07</b>	A-A-59551, TYPE S, 25 AWG, tin plated 100 micro-inches; 0.5"	<b>16</b>	M22759/33-26(*), 72"		
<b>C</b>	21	<b>08</b>	A-A-59551, TYPE S, 25 AWG, tin plated 100 micro-inches; 1.0"	<b>17</b>	04035-26A-9, 18"		
<b>D</b>	25	<b>09</b>	M22759/33-26-9, 18"	<b>18</b>	04035-26A-9, 36"		
<b>E</b>	31			<b>19</b>	04035-26A-9, 72"		
<b>F</b>	37			<b>20</b>	04035-26A-(*) , 18"		
<b>G</b>	51			<b>21</b>	04035-26A-(*) , 36"		
<b>H</b>	100			<b>22</b>	04035-26A-(*) , 72"		



### WIRE TERMINATION: M83513/03 & /04



### SOLDER CUP TERMINATION PLUG/RECEPTACLE: M83513/01 & /02



Dimensions are in inch (mm)

SIZE	A MAX	±0.005 (0.13) B	C MAX		D MAX	E MAX	F MAX	G MAX	
			PLUG	RCPT				PLUG	RCPT
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.402 (10.21)	.270 (6.86)	.308 (7.82)	.400 (10.16)	.185 (4.70)	.253 (6.43)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.552 (14.02)			.550 (13.97)		
21	1.085 (27.56)	.865 (21.97)	.634 (16.10)	.702 (17.83)			.700 (17.78)		
25	1.185 (30.10)	.965 (24.51)	.734 (18.64)	.802 (20.37)			.800 (20.32)		
31	1.335 (33.91)	1.115 (28.32)	.884 (22.45)	.952 (24.18)			.950 (24.13)		
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.102 (27.99)			1.100 (27.94)		
51	1.435 (36.45)	1.215 (30.86)	.984 (24.99)	1.052 (26.72)	.310 (7.87)	.351 (8.92)	1.050 (26.67)	.228 (5.79)	.296 (7.52)
69	1.735 (44.07)	1.515 (38.48)	1.289 (32.74)	1.357 (34.47)			1.350 (34.29)		
100	2.170 (55.12)	1.800 (45.72)	1.384 (35.13)	1.452 (36.88)			1.442 (36.63)		

Note: In receptacle, interfacial seal not included for plastic shell

# MICRO-D PCB CONNECTORS

## SERIES 100, 102, & 104

QUALIFIED TO M83513/10 THRU /33

### How To Order:

### FEATURES

- Available in straight and right angle termination style
- Solid copper 24 AWG PCB leads, Tin plated, and solder dipped

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
RoHS Compliance	Connector Series	Insulator Material	Shell Finish	Connector Size	Connector Type	Termination Type	Hardware	Threaded Insert	Lead Length (inches)	Non-Standard Length (inches)
	100	R	N	25	P-	BR	P	T	F-	125

MICRO-D

#### 1. RoHS Compliance

<b>E</b>	RoHS Compliant
	Blank for Non-RoHS

#### 5. Connector Size (Number of Contacts)

<b>09</b>
<b>15</b>
<b>21</b>
<b>25</b>
<b>31</b>
<b>37</b>
<b>51</b>
<b>69</b>
<b>100</b>

All sizes I.A.W M83513 except size 69 (non-military)

#### 2. Connector Series

<b>100</b>	Metal Shell Per M83513
<b>102</b>	Plastic Shell (Dimensionally Identical to Metal Shell Per M83513)
<b>104</b>	Stainless Steel (Dimensionally identical to metal shell per M83513)

#### 6. Connector Type

<b>P-</b>	Plug
<b>S-</b>	Receptacle
<b>G-</b>	Plug with Ground Spring

#### 3. Insulator Material

<b>R</b>	Polyphenylene Sulfide (Ryton)
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#### 7. Termination Type

<b>CBR</b>	Narrow Right Angle PCB Per M83513/10 - /15
<b>HBR</b>	High Density CBR
<b>BR</b>	Right angle PCB Per M83513/16 - /21
<b>BS</b>	Straight PCB Per M83513/22 - /27
<b>C6</b>	Straight PCB Per M83513/28 - /33
<b>H6</b>	High Density C6
<b>C16</b>	Straight PCB with Flange (C6 PCB Configuration)
<b>H16</b>	High Density C16

#### 4. Shell Finish

<b>A</b>	Anodized (Black)
<b>B</b>	Zinc Nickel (Black Chromate)
<b>C</b>	Cadmium (Yellow Chromate)
<b>D</b>	Olive Drab Cadmium
<b>F</b>	Chem Film
<b>N</b>	Electroless Nickel
<b>G</b>	Gold
<b>K</b>	Zinc Nickel - 48 Hrs
<b>L</b>	Pure Electro-Deposited Aluminum
<b>T</b>	Nickel Teflon

#### 8. Hardware BS, BR, CBR/HBR & C6/H6 (Pre-Installed)

	Omit for no jackpost or thread
<b>H</b>	Threaded Mounting Hole #2-56 (Size 9-69), #4-40 (Size 100)
<b>D</b>	Metric Threaded Mounting Hole M2 (Size 9-96), M3 (Size 100)
<b>P</b>	Jackpost
<b>PA</b>	Hex Head Rear Panel Mount Jackpost for .027"-.037" [.68mm-.94mm]
<b>PB</b>	Hex Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness
<b>PC</b>	Hex Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
<b>PD</b>	Hex Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
<b>PE</b>	Hex Head RPM for .075"-.085" [1.91mm - 2.16mm] Panel Thickness
<b>PF</b>	Hex Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness

#### 8. Hardware BS, BR, CBR/HBR & C6/H6 (Pre-Installed)

<b>PG</b>	Hex Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness
<b>SA</b>	Slot Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness
<b>SB</b>	Slot Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness
<b>SC</b>	Slot Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
<b>SD</b>	Slot Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
<b>SE</b>	Slot Head RPM for .075"-.085" [1.91mm - 2.16mm] Panel Thickness
<b>SF</b>	Slot Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
<b>SG</b>	Slot Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness

#### 8. Hardware C16/H16 Only

<b>B</b>	Standard Mounting Holes
<b>M2</b>	Low Profile Jackscrew, Allen Head
<b>M3</b>	High Profile Jackscrew, Allen Head
<b>M5</b>	Low Profile Jackscrew, Slot Head
<b>M6</b>	High Profile Jackscrew, Slot Head
<b>L</b>	Captive Low Profile Jackscrew
<b>K</b>	Captive High Profile Jackscrew
<b>F</b>	Forward Float Mount
<b>R</b>	Reverse Float Mount

### How To Order:

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
RoHS Compliance	Connector Series	Insulator Material	Shell Finish	Connector Size	Connector Type	Termination Type	Hardware	Threaded Insert	Lead Length (inches)	Non-Standard Length (inches)
	100	R	N	25	P-	BR	P	T	F-	125

9. Threaded Insert (Pre-Installed PCB Mounting Options)	
	Omit for no threaded Insert
<b>T</b>	#2-56 Threaded Insert (Size 9-69)
<b>U</b>	#4-40 Threaded Insert (Size 100 Only)
<b>V</b>	M2 Threaded Insert (Size 9-69)
<b>Z</b>	M3 Threaded Insert (Size 100 Only)

10. Lead Length (inches)	
<b>1-</b>	.109 ± .015
<b>2-</b>	.140 ± .015
<b>3-</b>	.172 ± .015
<b>4-</b>	.250 ± .015
<b>F-</b>	Non Standard Length
<b>GOLD</b>	
<b>5-</b>	.109 ± .015
<b>6-</b>	.140 ± .015
<b>7-</b>	.172 ± .015
<b>8-</b>	.250 ± .015
<b>G-</b>	Non Standard Length

11. Non-Standard Length (inches)
(0.109 < Length < 1.00)
e.g -125 =.125 Inches

### M83513 PCB TERMINATION

1.	2.	3.	4.	5.	6.
Connector Series	Specifications Sheet	Insert Arrangement	Lead Length	Shell Finish	Hardware
M83513/	10-	A	01	N	P

2. Specifications Sheets	
<b>10-</b>	Plug (Pin), CBR Type, Size 9-37
<b>11-</b>	Plug (Pin), CBR Type, Size 51
<b>12-</b>	Plug (Pin), CBR Type, Size 100
<b>13-</b>	Receptacle (Socket), CBR Type, Size 9-37
<b>14-</b>	Receptacle (Socket), CBR Type, Size 51
<b>15-</b>	Receptacle (Socket), CBR Type, Size 100
<b>16-</b>	Plug (Pin), BR Type, Size 9-37
<b>17-</b>	Plug (Pin), BR Type, Size 51
<b>18-</b>	Plug (Pin), BR Type, Size 100
<b>19-</b>	Receptacle (Socket), BR Type, Size 9-37
<b>20-</b>	Receptacle (Socket), BR Type, Size 51
<b>21-</b>	Receptacle (Socket), BR Type, Size 100

2. Specifications Sheets	
<b>22-</b>	Plug (Pin), BS Type, Size 9-37
<b>23-</b>	Plug (Pin), BS Type, Size 51
<b>24-</b>	Plug (Pin), BS Type, Size 100
<b>25-</b>	Receptacle (Socket), BS Type, Size 9-37
<b>26-</b>	Receptacle (Socket), BS Type, Size 51
<b>27-</b>	Receptacle (Socket), BS Type, Size 100
<b>28-</b>	Plug (Pin), C6 Type, Size 9-37
<b>29-</b>	Plug (Pin), C6 Type, Size 51
<b>30-</b>	Plug (Pin), C6 Type, Size 100
<b>31-</b>	Receptacle (Socket), C6 Type, Size 9-37
<b>32-</b>	Receptacle (Socket), C6 Type, Size 51
<b>33-</b>	Receptacle (Socket), C6 Type, Size 100

3. Insert Arrangement	
<b>A</b>	9
<b>B</b>	15
<b>C</b>	21
<b>D</b>	25
<b>E</b>	31
<b>F</b>	37
<b>G</b>	51*
<b>H</b>	100**

\*Applicable for spec sheet 11, 14, 17, 20, 23, 26, 29, & 32  
 \*\*Applicable for spec sheet 12, 15, 18, 21, 24, 27, 30, & 33

4. Lead Length (inches)	
<b>01</b>	.109 ± .015
<b>02</b>	.140 ± .015
<b>03</b>	.172 ± .015

5. Shell Finish	
<b>C</b>	Cadmium
<b>N</b>	Electroless Nickel
<b>P</b>	Passivated Stainless Steel

6. Hardware	
<b>N</b>	No Jackpost or Threaded Insert
<b>P</b>	Jackpost
<b>T</b>	Threaded Insert
<b>W</b>	Jackpost and Threaded Insert



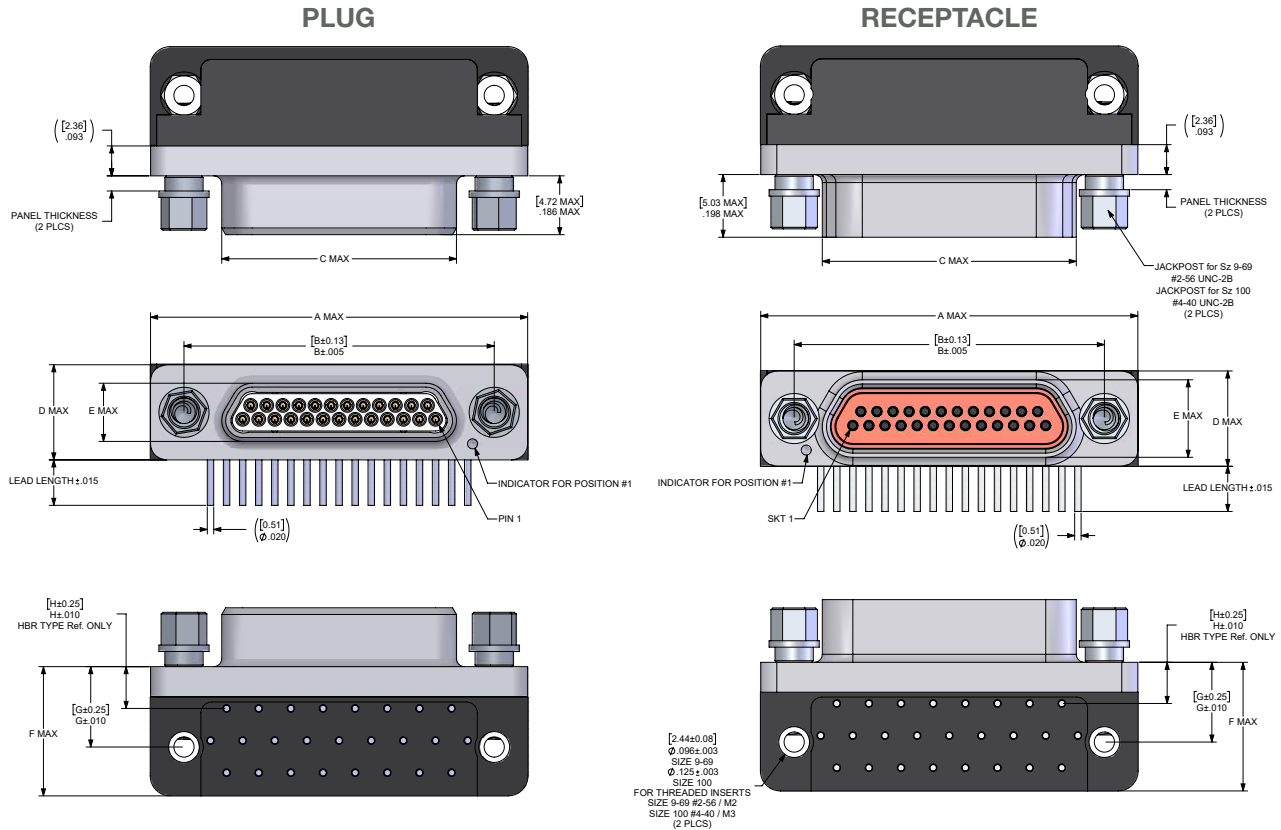
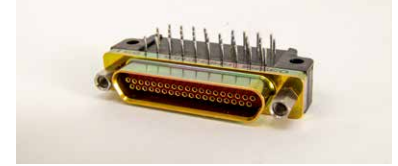
# MICRO-D PCB CONNECTORS

## SERIES 100, 102, & 104

QUALIFIED TO M83513/10 THRU /15

### CBR/HBR Termination

BOARD RIGHT ANGLE CONNECTOR



MICRO-D

Note: In receptacle, interfacial seal not included for plastic shell

Dimensions are in inch(mm)

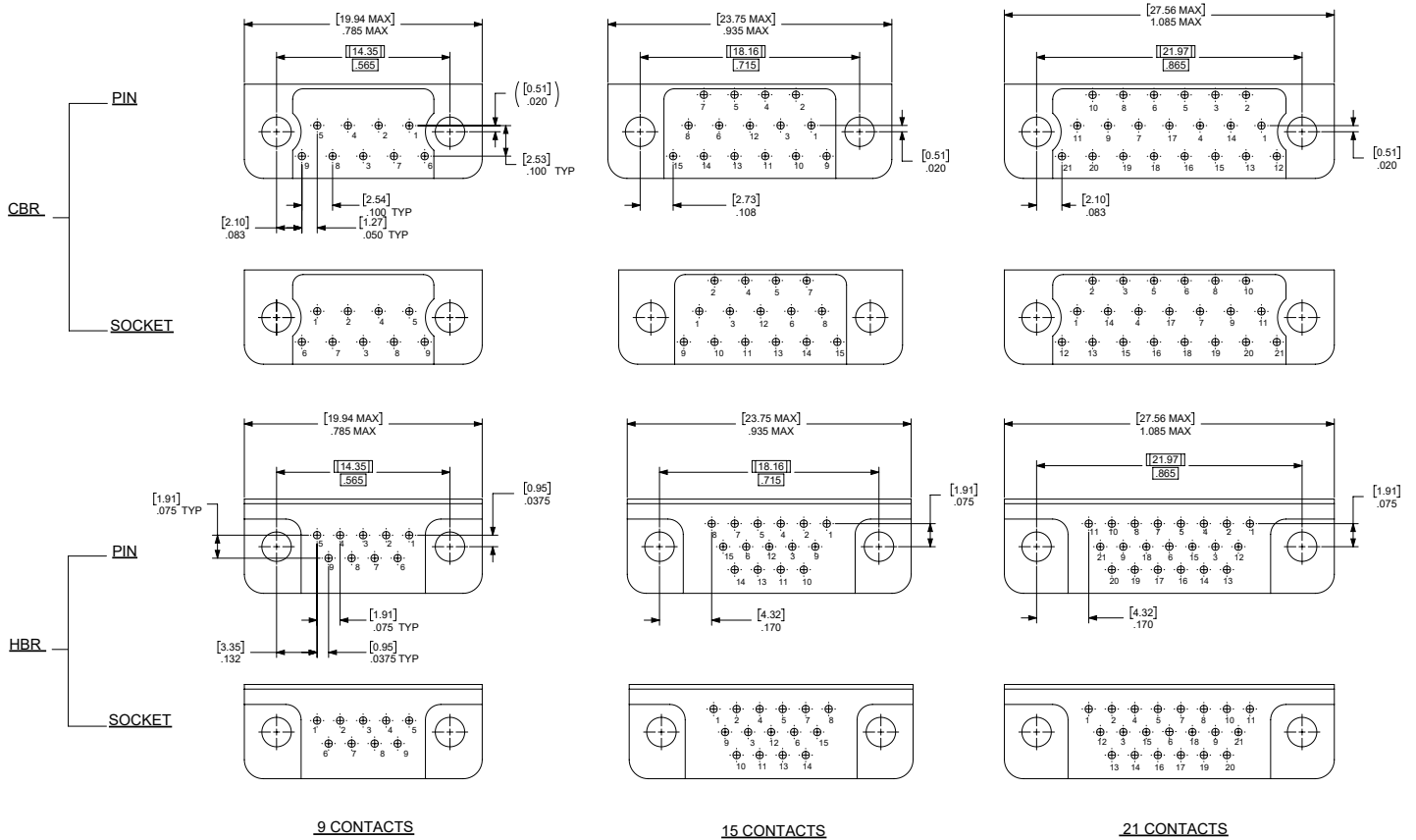
SIZE	A MAX	B ±.005 (0.13)	C MAX		D MAX	E MAX		F MAX		G ±.010 (0.25)	H	
			PLUG	RCPT		PLUG	RCPT	CBR	HBR		CBR ±.010 (0.25)	HBR ref.
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.402 (10.21)							.230 (5.84)	.213 (5.41)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.552 (14.02)				.420 (10.67)				
21	1.085 (27.56)	.865 (21.97)	.634 (16.10)	.702 (17.83)					.400 (10.16)	.250 (6.35)	.130 (3.30)	.175 (4.45)
25	1.185 (30.10)	.965 (24.51)	.734 (18.64)	.802 (20.37)	.308 (7.82)	.185 (4.70)	.253 (6.43)					
31	1.335 (33.91)	1.115 (28.32)	.884 (22.45)	.952 (24.18)				.520 (13.21)				
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.102 (27.99)								
51	1.435 (36.45)	1.215 (30.86)	.984 (24.99)	1.052 (26.72)	.351 (8.92)	.228 (5.79)	.296 (7.52)	.650 (16.15)	.490 (12.45)	.300 (7.62)	.150 (3.81)	.188 (4.78)
69	1.735 (44.07)	1.515 (38.48)	1.289 (32.74)	1.357 (34.47)				.755 (19.18)			.150 (3.81)	.188 (4.78)
100	2.170 (55.12)	1.800 (45.72)	1.384 (35.15)	1.452 (36.88)	.394 (10.01)	.271 (6.88)	.333 (8.46)	1.000 (25.40)	.660 (16.76)	.400 (10.16)	.200 (5.08)	.213 (5.41)

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Download 2D drawings & 3D models using our online configurator.

### CBR | HBR TERMINATION TYPE RIGHT ANGLE (90 DEG) NARROW PROFILE PC CONFIGURATIONS

.100 (2.54) X .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)

.075 (1.91) X .075 (1.91) GRID PATTERN, OFFSET .0375 (.95)



Note: HBR not included for Series 101

Cavity identification numbers are for reference only and does not appear on the connector.

# MICRO-D PCB CONNECTORS

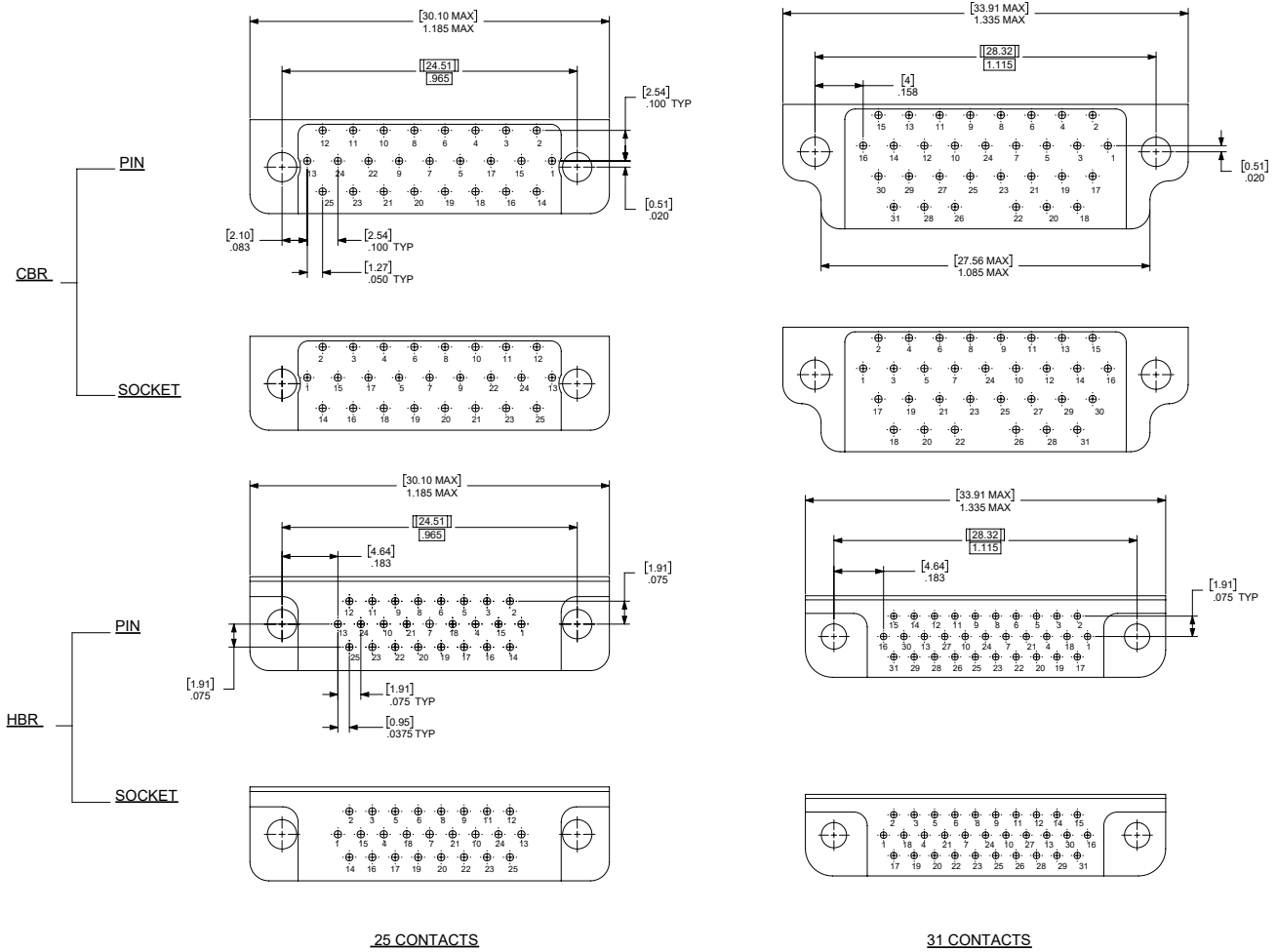
## SERIES 100, 102, & 104

### CBR | HBR TERMINATION TYPE RIGHT ANGLE (90 DEG) NARROW PROFILE PC CONFIGURATIONS

.100 (2.54) X .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)

.075 (1.91) X .075 (1.91) GRID PATTERN, OFFSET .0375 (.95)

MICRO-D



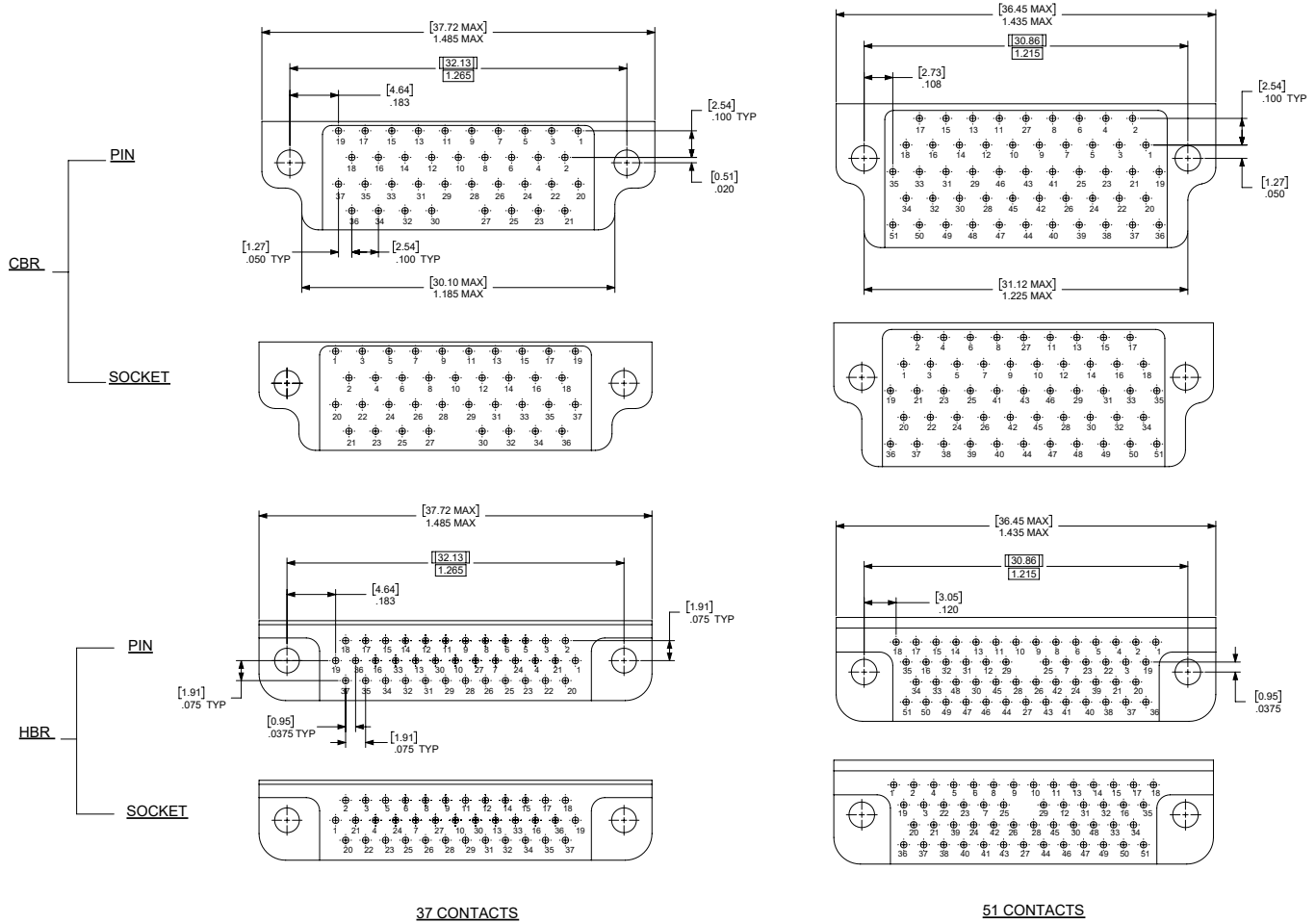
Note: HBR not included for Series 101

Cavity identification numbers are for reference only and does not appear on the connector.

### CBR | HBR TERMINATION TYPE RIGHT ANGLE (90 DEG) NARROW PROFILE PC CONFIGURATIONS

.100 (2.54) X .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)

.075 (1.91) X .075 (1.91) GRID PATTERN, OFFSET .0375 (.95)



Note: HBR not included for Series 101

Cavity identification numbers are for reference only and does not appear on the connector.

# MICRO-D PCB CONNECTORS

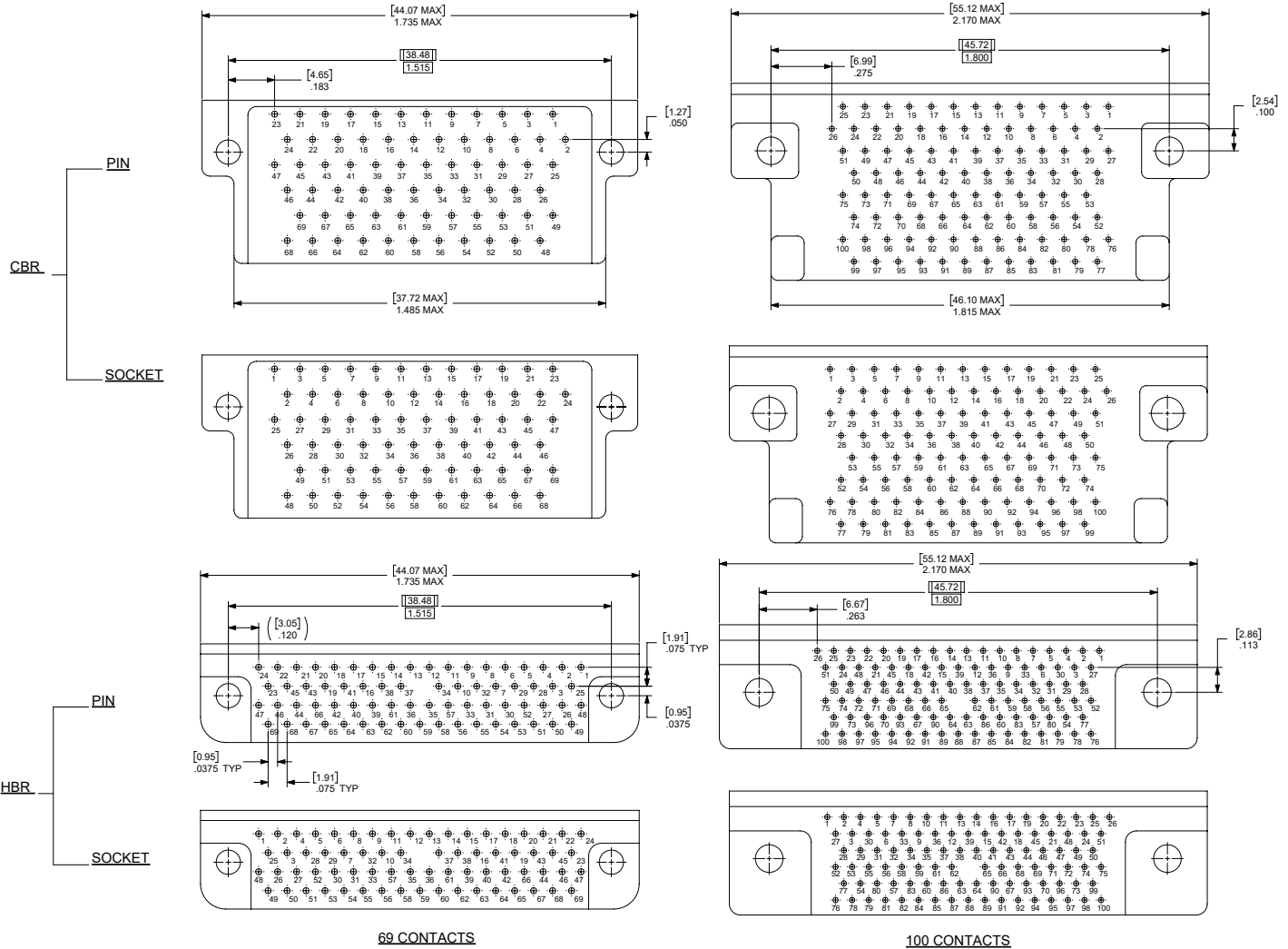
## SERIES 100, 102, & 104

### CBR | HBR TERMINATION TYPE RIGHT ANGLE (90 DEG) NARROW PROFILE PC CONFIGURATIONS

.100 (2.54) X .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)

.075 (1.91) X .075 (1.91) GRID PATTERN, OFFSET .0375 (.95)

MICRO-D



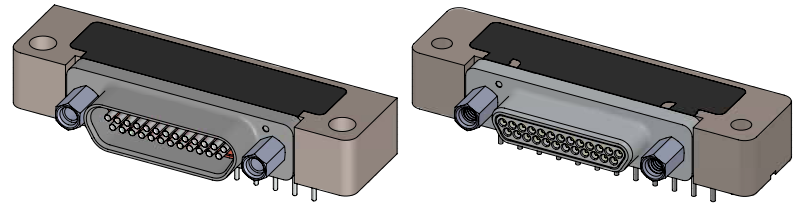
Note: HBR not included for Series 101

Cavity identification numbers are for reference only and does not appear on the connector.



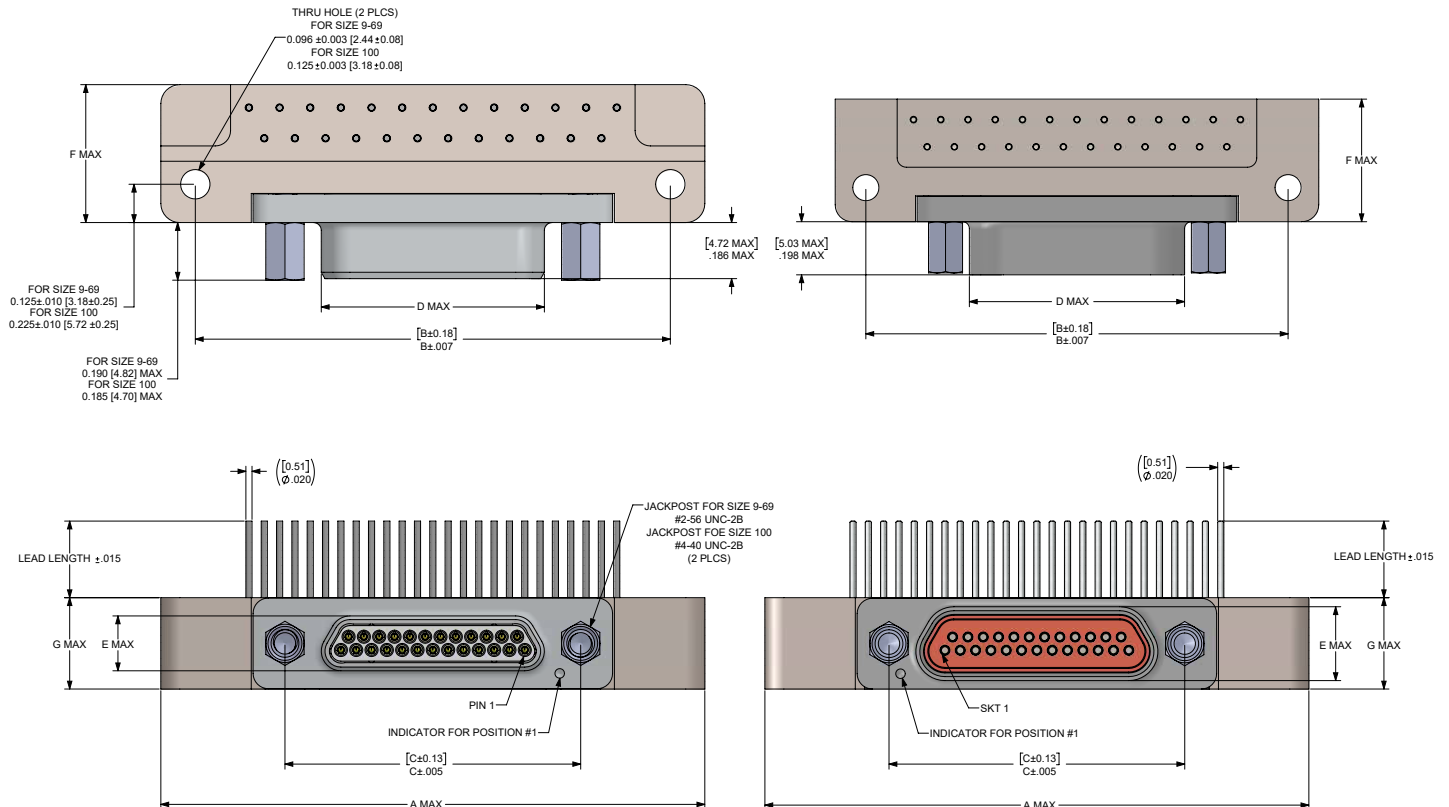
### BR Termination

BOARD RIGHT ANGLE CONNECTOR



**PLUG**

**RECEPTACLE**



Dimensions are in inch (mm)

SIZE	A MAX	B ±.007 (0.18)	C ±.005 (0.13)	D MAX		E MAX		F MAX	G MAX
				PLUG	RCPT	PLUG	RCPT		
09	1.390 (35.31)	1.150 (29.21)	.565 (14.35)	.334 (8.48)	.402 (10.21)				
15	1.540 (39.12)	1.300 (33.02)	.715 (18.16)	.484 (12.29)	.552 (14.02)				
21	1.690 (42.93)	1.450 (36.83)	.865 (21.97)	.634 (16.10)	.702 (17.83)	.185 (4.70)	.253 (6.43)	.455 (11.56)	.308 (7.82)
25	1.790 (45.47)	1.550 (39.37)	.965 (24.51)	.734 (18.64)	.802 (20.37)				
31	2.040 (51.82)	1.800 (45.72)	1.115 (28.32)	.884 (22.45)	.952 (24.18)				
37	2.340 (59.44)	2.100 (53.34)	1.265 (32.13)	1.034 (26.26)	1.102 (27.99)				
51	1.875 (47.63)	1.600 (40.64)	1.215 (30.86)	.984 (24.99)	1.052 (26.72)	.228 (5.79)	.296 (7.52)	.565 (14.35)	.351 (8.92)
69	2.500 (63.50)	2.200 (55.88)	1.515 (34.48)	1.289 (32.74)	1.357 (34.47)				
100	2.780 (70.61)	2.500 (63.50)	1.800 (45.72)	1.384 (35.15)	1.452 (36.88)				

Note: In receptacle, interfacial seal not included for plastic shell

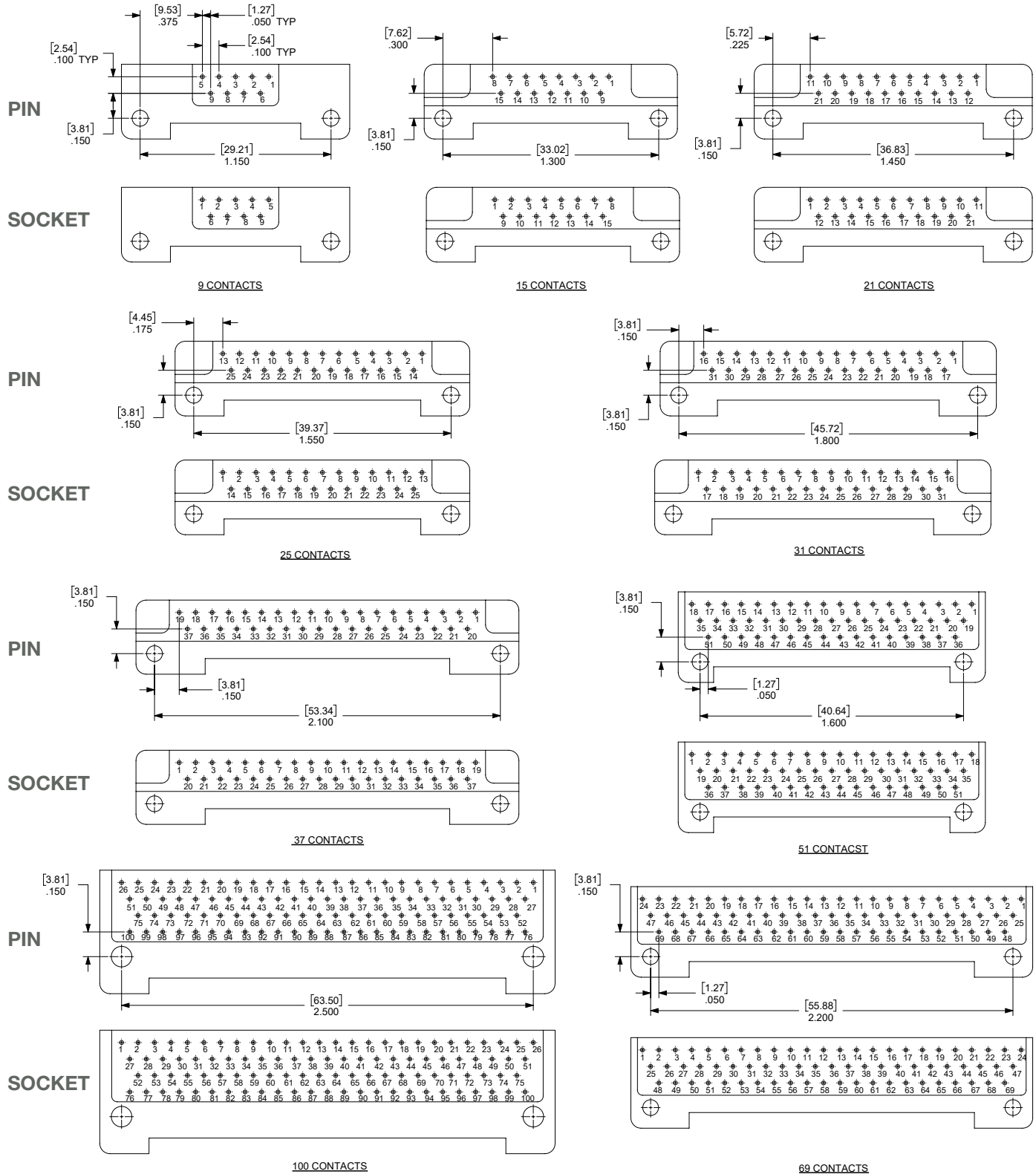
# MICRO-D PCB CONNECTORS

## SERIES 100, 102, & 104

### BR TERMINATION TYPE RIGHT ANGLE (90 DEG) PC CONFIGURATIONS

.100 (2.54) X .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)

MICRO-D

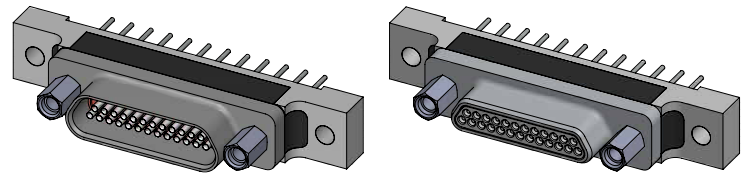


Cavity identification numbers are for reference only and does not appear on the connector.

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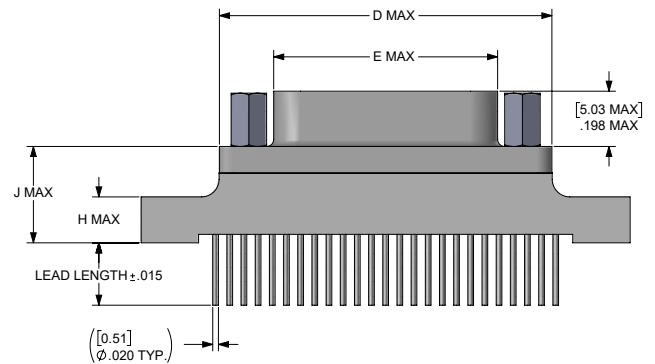
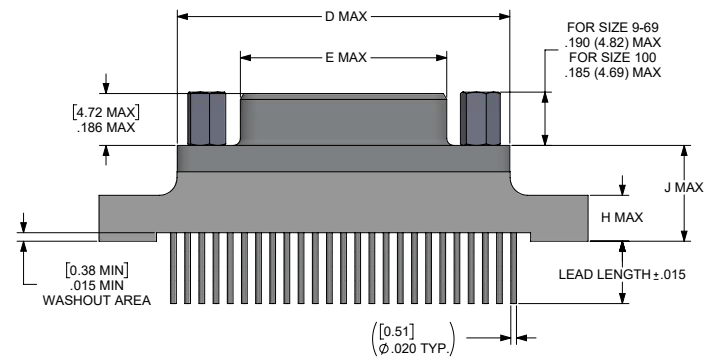
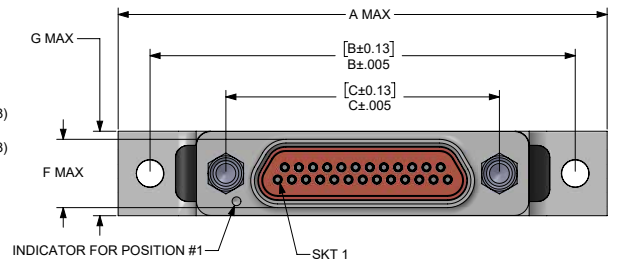
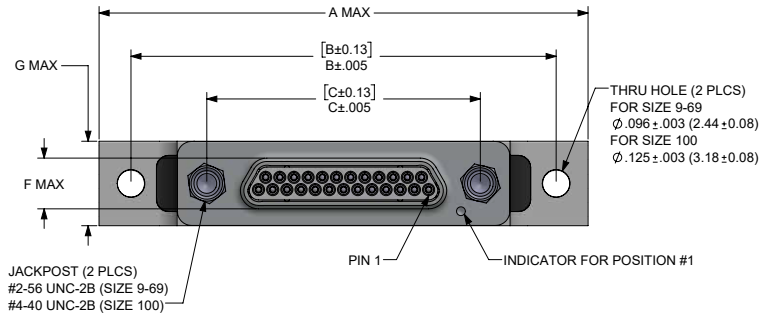
### BS Termination

BOARD STRAIGHT CONNECTOR



**PLUG**

**RECEPTACLE**



Dimensions are in inch(mm)

SIZE	A MAX	±.005 (0.13)	±.005 (0.13)	D MAX	E MAX		F MAX		G MAX	H MAX	J MAX
					PLUG	RCPT	PLUG	RCPT			
09	1.390 (35.31)	1.150 (29.21)	.565 (14.35)	.785 (19.94)	.334 (8.48)	.402 (10.21)					
15	1.390 (35.31)	1.150 (29.21)	.715 (18.16)	.935 (23.75)	.484 (12.29)	.552 (14.02)					
21	1.690 (42.93)	1.450 (36.83)	.865 (21.97)	1.085 (27.56)	.634 (16.10)	.702 (17.83)	.185 (4.70)	.253 (6.43)	.308 (7.82)	.165 (4.19)	.355 (9.02)
25	1.740 (44.20)	1.500 (38.10)	.965 (24.51)	1.185 (30.10)	.734 (18.64)	.802 (20.37)					
31	2.040 (51.82)	1.800 (45.72)	1.115 (28.32)	1.335 (33.91)	.884 (22.45)	.952 (24.18)					
37	2.340 (59.44)	2.100 (53.34)	1.265 (32.13)	1.485 (37.72)	1.034 (26.26)	1.102 (27.99)					
51	2.270 (57.66)	2.000 (50.80)	1.215 (30.86)	1.435 (36.45)	.984 (24.99)	1.052 (26.72)	.228 (5.79)	.296 (7.52)	.351 (8.92)		
69	2.870 (72.90)	2.600 (66.04)	1.515 (38.48)	1.735 (44.07)	1.289 (32.74)	1.357 (34.47)					
100	3.070 (77.98)	2.800 (71.12)	1.800 (45.72)	2.170 (55.12)	1.384 (35.13)	1.452 (36.88)	.271 (6.88)	.333 (8.46)	.460 (11.68)	.303 (7.70)	.550 (13.97)

Note: In receptacle, interfacial seal not included for plastic shell

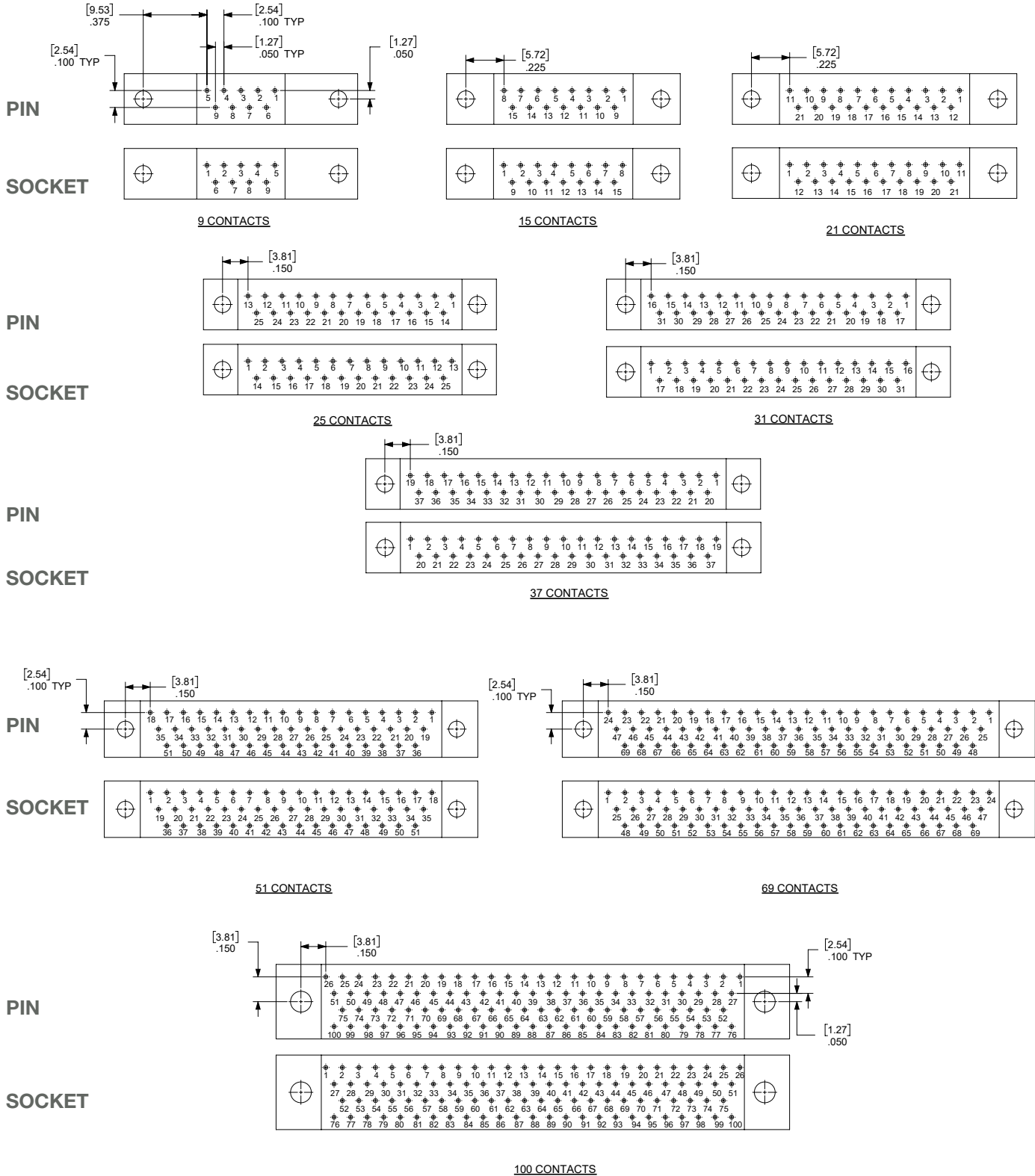
# MICRO-D PCB CONNECTORS

## SERIES 100, 102, & 104

### BS TERMINATION TYPE STRAIGHT PC CONFIGURATIONS (REAR VIEW)

.100 (2.54) X .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)

MICRO-D

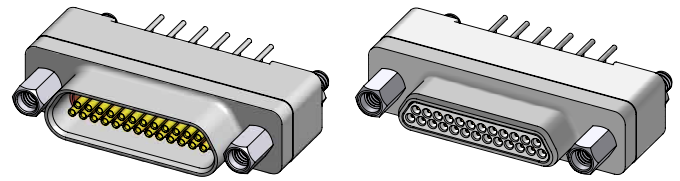


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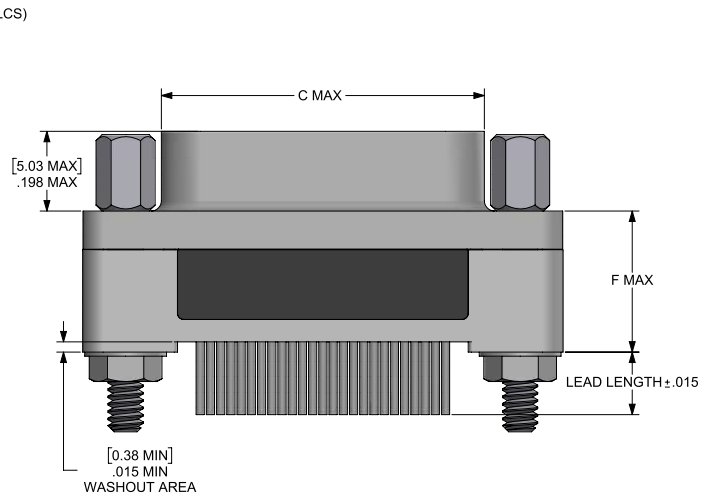
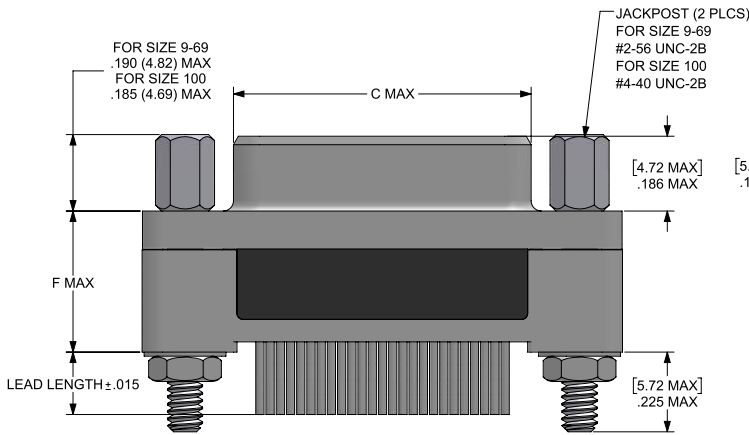
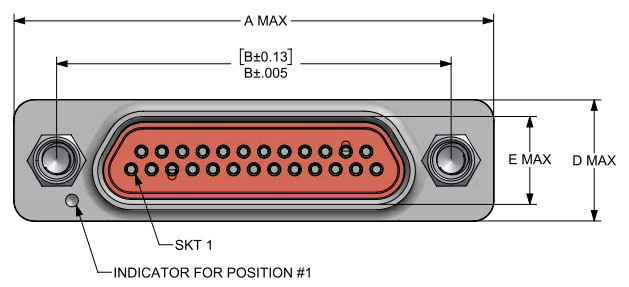
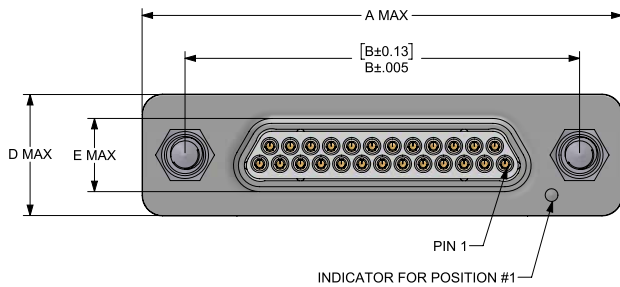
### C6/H6 Termination

BOARD STRAIGHT CONNECTOR



**PLUG**

**RECEPTACLE**



Dimensions are in inch(mm)

SIZE	A MAX	B ±.005 (0.13)	C MAX		D MAX		E MAX		F MAX
			PLUG	RCPT	C6	H6	PLUG	RCPT	
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.400 (10.16)	.310 (7.87)	.310 (7.87)	.185 (4.70)	.251 (6.38)	.355 (9.02)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.550 (13.97)					
21	1.085 (27.56)	.865 (21.97)	.634 (16.10)	.700 (17.78)					
25	1.185 (30.10)	.965 (24.51)	.734 (18.64)	.800 (20.32)					
31	1.335 (33.91)	1.115 (28.32)	.884 (22.45)	.950 (24.13)					
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.100 (27.94)	.400 (10.16)	.351 (8.92)	.228 (5.79)	.296 (7.52)	
51	1.435 (36.45)	1.215 (30.86)	.984 (24.99)	1.050 (26.67)					
69	1.735 (44.07)	1.515 (38.48)	1.289 (32.74)	1.355 (34.42)					
100	2.170 (55.12)	1.800 (45.72)	1.384 (35.13)	1.451 (36.86)	.510 (12.95)	.470 (11.94)	.271 (6.88)	.333 (8.46)	.430 (10.92)

Note: In receptacle, interfacial seal not included for plastic shell

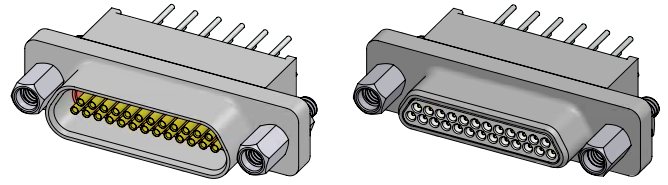


# MICRO-D PCB CONNECTORS

## SERIES 100, 102, & 104

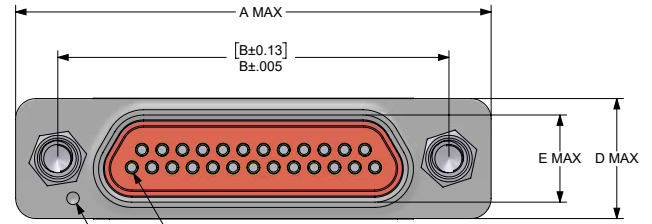
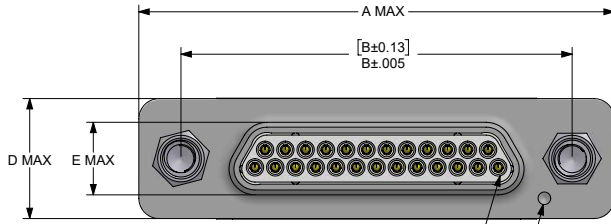
### C16/H16 Termination

BOARD STRAIGHT CONNECTOR



PLUG

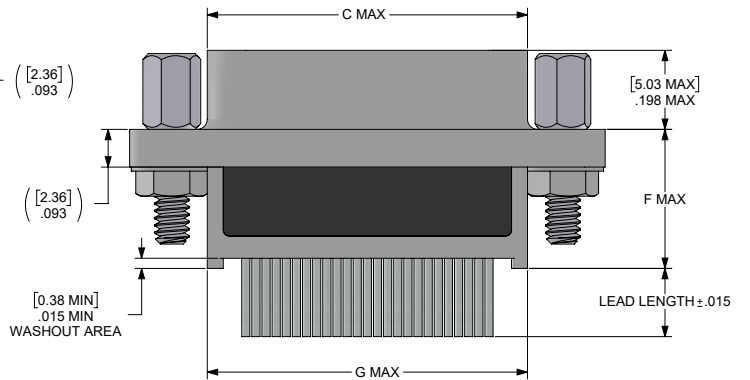
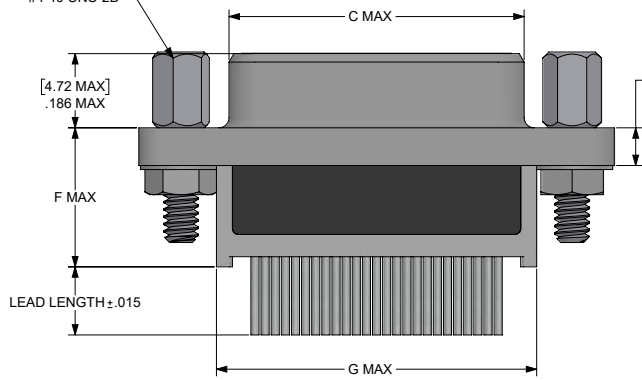
RECEPTACLE



JACKPOST (2 PLCS)  
FOR SIZE 9-69  
#2-56 UNC-2B  
FOR SIZE 100  
#4-40 UNC-2B

INDICATOR FOR POSITION #1

SKT 1  
INDICATOR FOR POSITION #1



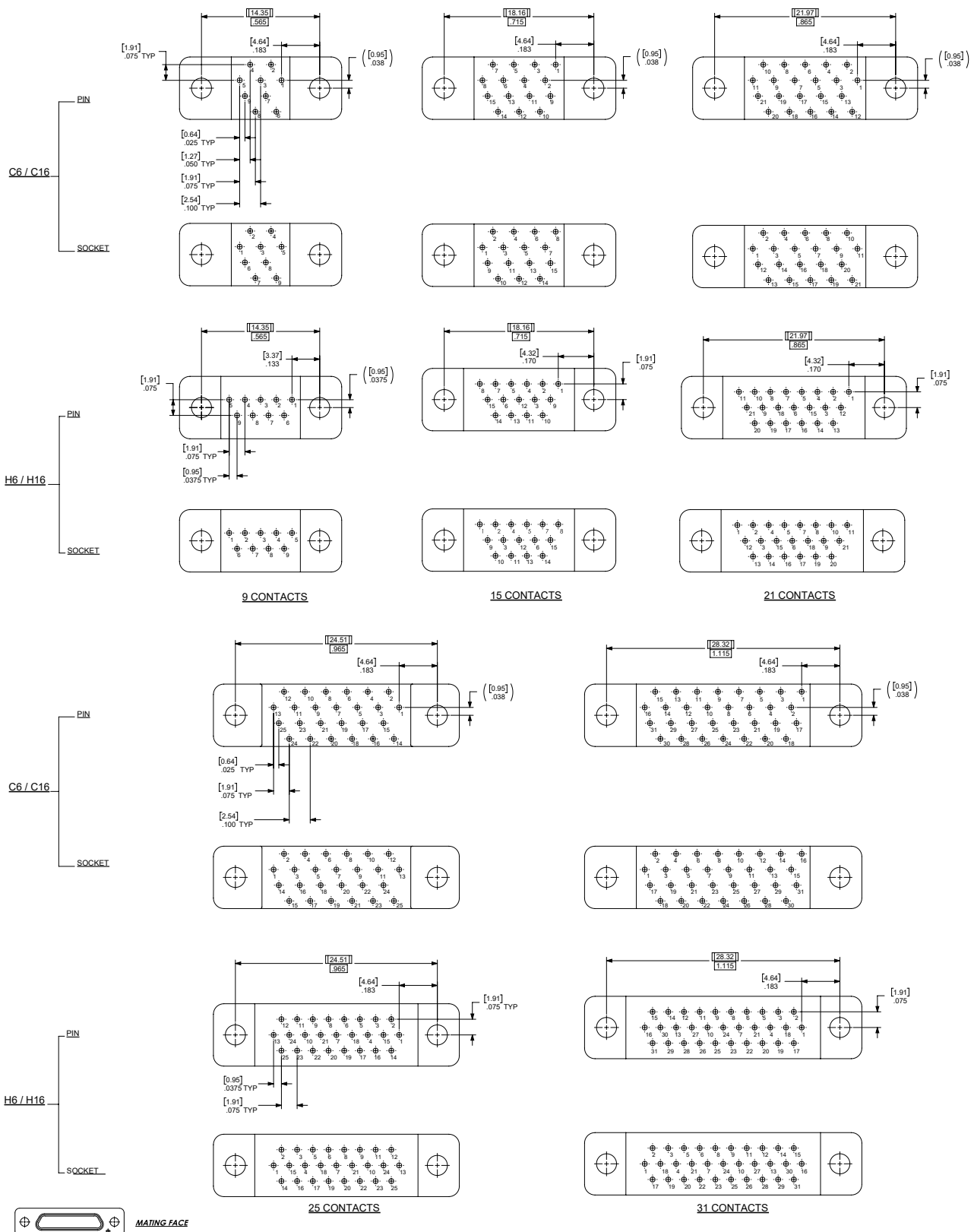
MICRO-D

Dimensions are in inch(mm)

SIZE	A MAX	B ±.005 (0.13)	C MAX		D MAX		E MAX		F MAX	G MAX
			PLUG	RCPT	C16	H16	PLUG	RCPT		
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.400 (10.16)	.310 (7.87)	.310 (7.87)	.185 (4.70)	.251 (6.38)	.355 (9.02)	.395 (10.03)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.550 (13.97)						.545 (13.84)
21	1.085 (27.56)	.865 (21.97)	.634 (16.10)	.700 (17.78)						.695 (17.65)
25	1.185 (30.10)	.965 (24.51)	.734 (18.64)	.800 (20.32)						.795 (20.19)
31	1.335 (33.91)	1.115 (28.32)	.884 (22.45)	.950 (24.13)						.945 (24.00)
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.100 (27.94)						1.095 (27.81)
51	1.435 (36.45)	1.215 (30.86)	.984 (24.99)	1.050 (26.67)	.351 (8.92)	.351 (8.92)	.228 (5.79)	.296 (7.52)	1.050 (26.67)	
69	1.735 (44.07)	1.515 (38.48)	1.289 (32.74)	1.355 (34.42)					1.350 (34.29)	
100	2.170 (55.12)	1.800 (45.72)	1.384 (35.15)	1.451 (36.86)					.470 (11.94)	.470 (11.94)

Note: In receptacle, interfacial seal not included for plastic shell

### C6 C16 | H6 H16 TERMINATION TYPE VERTICAL MOUNT REAR VIEW



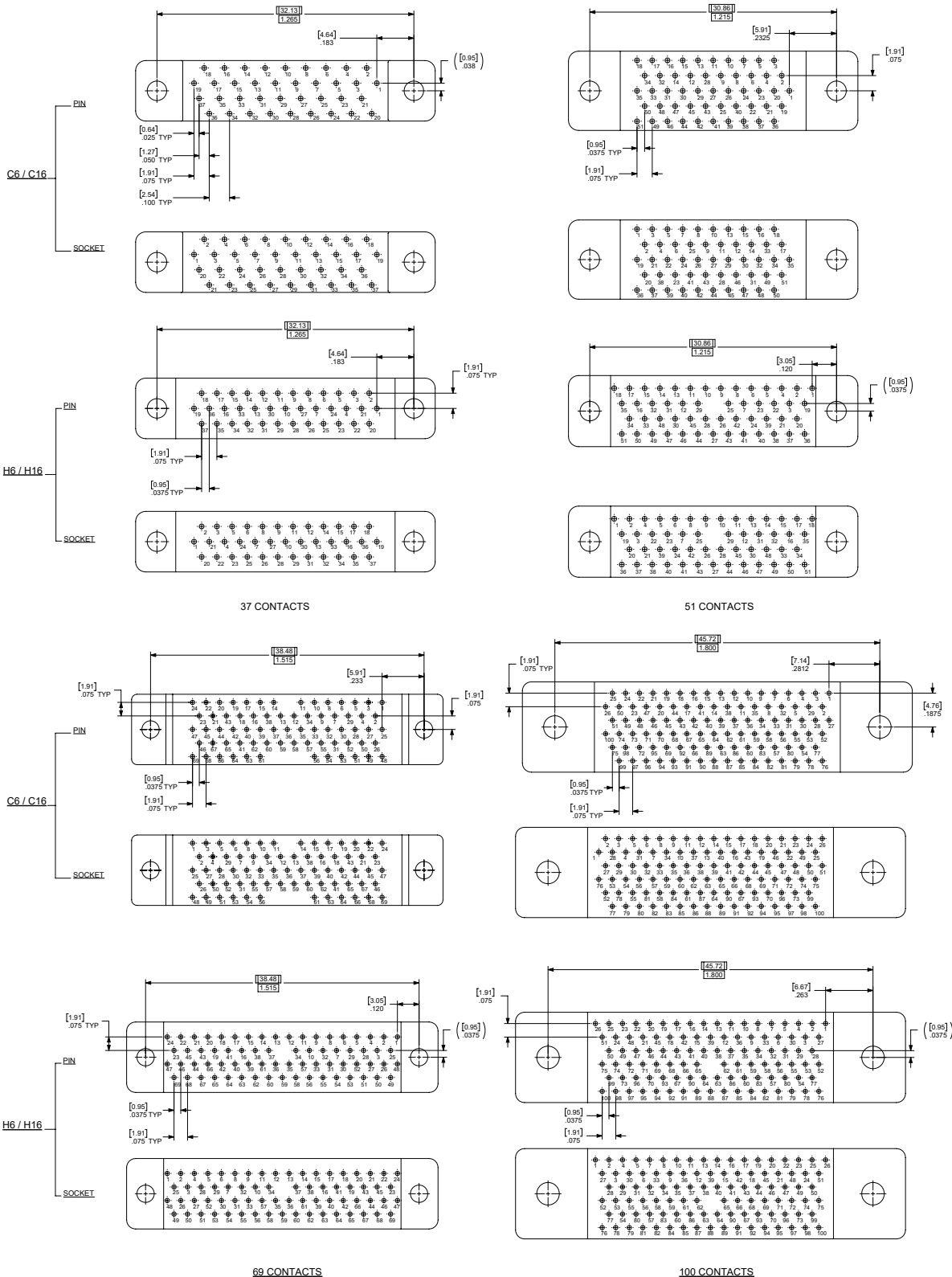
Note: H6 not included for Series 101.

Cavity identification numbers are for reference only and does not appear on the connector.

# MICRO-D PCB CONNECTORS

## SERIES 100, 102, & 104

### C6 C16 | H6 H16 TERMINATION TYPE VERTICAL MOUNT REAR VIEW



Note: H6 not included for Series 101.  
Cavity identification numbers are for reference only and does not appear on the connector.

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Download 2D drawings & 3D models using our online configurator.

## How To Order: FEATURES

- Polarization is reversed from a standard series 100 CBR type connector.
- Only available in metal shell
- Solid copper 24 AWG PCB leads, tin plated, and solder dipped.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
RoHS Compliance	Connector Series	Insulated/Sealing	Shell Finish	Connector Size	Connector Type	Termination Type	Hardware	Threaded Insert	Lead Length (inches)	Non Standard Length
	110	R	N	25	P-	CBR	P	T	F-	125

### 1. RoHS Compliance

<b>E</b>	RoHS Compliant
	Blank for Non-RoHS

### 2. Connector Series

<b>110</b>	Reversed CBR Type Metal Shell per M8513
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### 3. Insulated/Sealing

<b>R</b>	Polyphenylene Sulfide (Ryton)
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### 8. Hardware (Pre-Installed)

<b>H</b>	Thread Mounting Hole #2-56 (Size 9-69), #4-40 (Size 100)
----------	--

<b>D</b>	Metric Threaded Mounting Hole M2 (Size 9-69), M3 (Size 100)
----------	---

<b>P</b>	Jackpost
----------	----------

<b>PA</b>	Hex Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness
-----------	--

<b>PB</b>	Hex Head RPM for .042" - .052"[1.06mm - 1.32mm] Panel Thickness
-----------	---

<b>PC</b>	Hex Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
-----------	--

<b>PD</b>	Hex Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
-----------	--

<b>PE</b>	Hex Head RPM for .075"-.085" [1.91mm - 2.16mm] Panel Thickness
-----------	--

<b>PF</b>	Hex Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
-----------	--

<b>PG</b>	Hex Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness
-----------	--

<b>SA</b>	Slot Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness
-----------	---

<b>SB</b>	Slot Head RPM for .042"- .052"[1.06mm - 1.32mm] Panel Thickness
-----------	---

<b>SC</b>	Slot Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
-----------	---

<b>SD</b>	Slot Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
-----------	---

<b>SE</b>	Slot Head RPM for .075"-.085" [1.91mm - 2.16mm] Panel Thickness
-----------	---

<b>SF</b>	Slot Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
-----------	---

<b>SG</b>	Slot Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness
-----------	---

### 4. Shell Finish

<b>A</b>	Anodize (Black)
<b>B</b>	Zinc Nickel (Black Chromate)
<b>C</b>	Cadmium (Yellow Chromate)
<b>D</b>	Olive Drab Cadmium
<b>F</b>	Chem Film
<b>G</b>	Gold
<b>K</b>	Zinc Nickel- 48 hrs
<b>L</b>	Pure Electro-Deposited Aluminum
<b>N</b>	Electroless Nickel
<b>T</b>	Nickel Teflon

### 5. Connector Size (Number of Contacts)

<b>09</b>	
<b>15</b>	
<b>21</b>	
<b>25</b>	
<b>31</b>	
<b>37</b>	
<b>51</b>	
<b>69</b>	
<b>100</b>	

All sizes I.A.W. M83513 except size 69 (non-military)

### 6. Connector Type

<b>P-</b>	Plug (Pin)
<b>S-</b>	Receptacle (Socket)
<b>G-</b>	Plug with Ground Spring

### 7. Termination Type

<b>CBR</b>	Narrow Right Angle PCB (Dimensionally same as M83513/10 thru /15)
------------	---

### 9. Threaded Insert (Pre-Installed PCB Mounting Options)

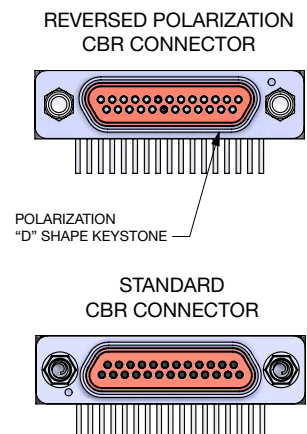
<b>T</b>	#2-56 Threaded Insert (Size 9-69)
<b>U</b>	#4-40 Threaded Insert (Size 100 Only)
<b>V</b>	M2 Threaded Insert (Size 9-69)
<b>Z</b>	M3 Threaded Insert (Size 100 Only)
	Blank for no threaded insert

### 10. Lead Length (inches)

<b>1-</b>	.109 ± .015
<b>2-</b>	.140 ± .015
<b>3-</b>	.172 ± .015
<b>4-</b>	.250 ± .015
<b>F-</b>	Non Standard Length
<b>GOLD</b>	
<b>5-</b>	.109 ± .015
<b>6-</b>	.140 ± .015
<b>7-</b>	.172 ± .015
<b>8-</b>	.250 ± .015
<b>G-</b>	Non Standard Length

### 11. Non Standard Length

(0.109 < length < 1.00)  
e.g. 125 = .125 inches

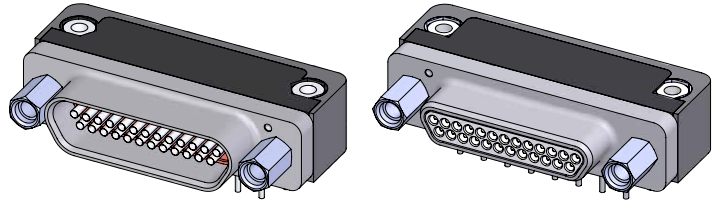


# MICRO-D PCB CONNECTORS

## SERIES 110

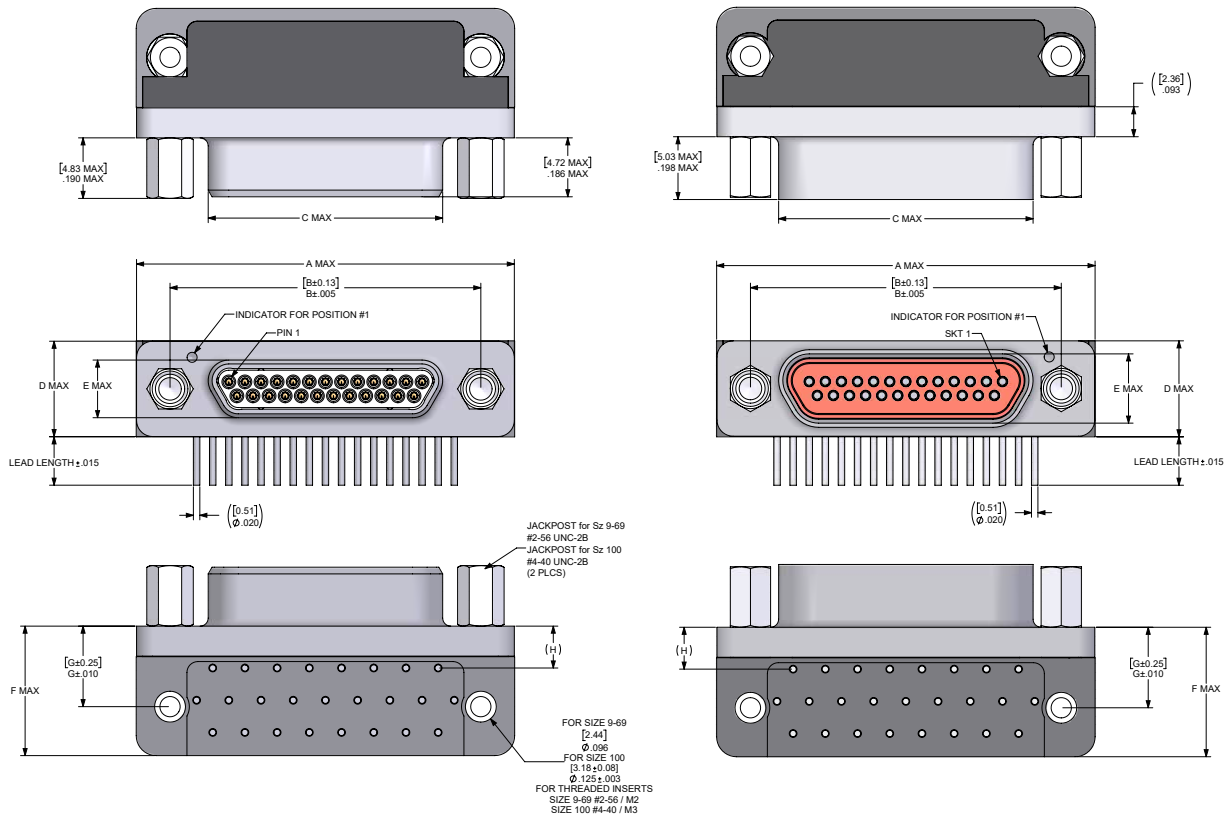
### CBR Termination

REVERSED POLARIZATION



PLUG

RECEPTACLE



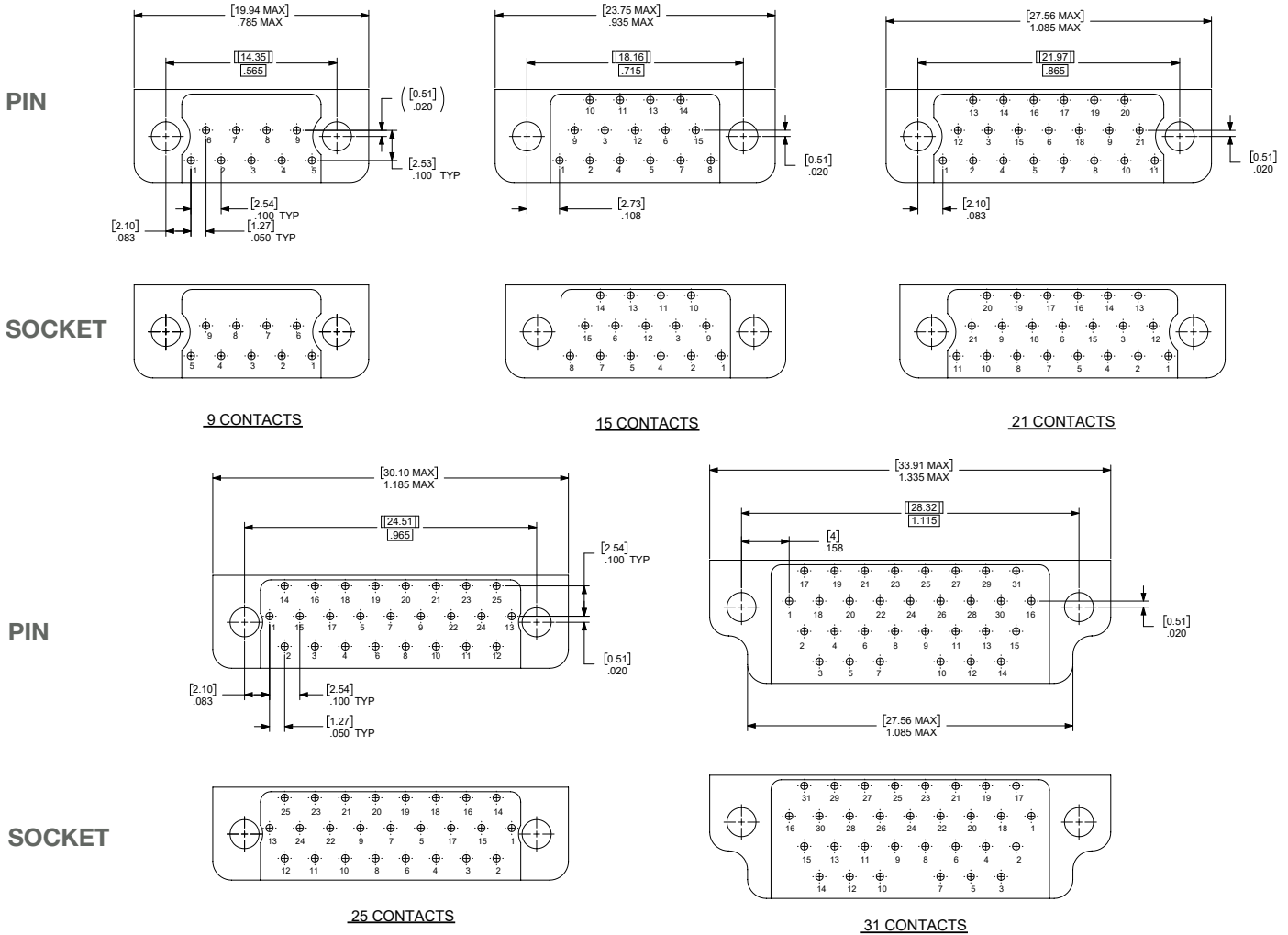
Dimensions are in inch(mm)

SIZE	A MAX	B ±0.005 (0.13)	C MAX		D MAX	E MAX		F MAX	G ±0.010 (0.25)	H ±0.010 (0.25)
			PLUG	RCPT		PLUG	RCPT			
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.402 (10.21)	.308 (7.82)	.185 (4.70)	.253 (6.43)	.420 (10.67)	.250 (6.35)	.230 (5.84)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.552 (14.02)						
21	1.085 (27.56)	.865 (21.97)	.634 (16.10)	.702 (17.83)						
25	1.185 (30.10)	.965 (24.51)	.734 (18.64)	.802 (20.37)						
31	1.335 (33.91)	1.115 (28.32)	.884 (22.45)	.952 (24.18)	.351 (8.92)	.228 (5.79)	.296 (7.52)	.300 (7.62)	.150 (3.81)	
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.22)	1.102 (27.99)						
51	1.435 (36.45)	1.215 (30.86)	.984 (24.99)	1.052 (26.72)						
69	1.735 (44.07)	1.515 (38.48)	1.289 (32.74)	1.357 (34.47)	.394 (10.01)	.271 (6.88)	.394 (10.01)	.755 (19.18)	.400 (10.16)	.200 (5.08)
100	2.170 (55.12)	1.800 (45.72)	1.384 (35.15)	1.452 (36.88)						



### REVERSED CBR TERMINATION TYPE RIGHT ANGLE (90 DEG) NARROW PROFILE CONFIGURATION

.100 (2.54) X .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)



Cavity identification numbers are for reference only and does not appear on the connector.

# MICRO-D PCB CONNECTORS

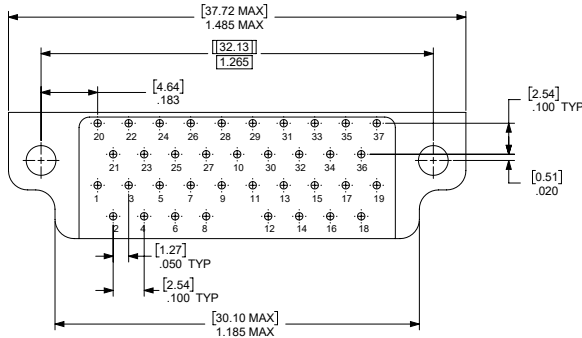
## SERIES 110

### REVERSED CBR TERMINATION TYPE RIGHT ANGLE (90 DEG) NARROW PROFILE CONFIGURATION

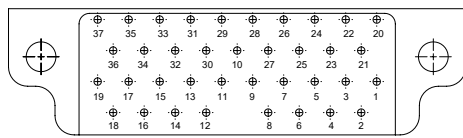
.100 (2.54) X .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)

MICRO-D

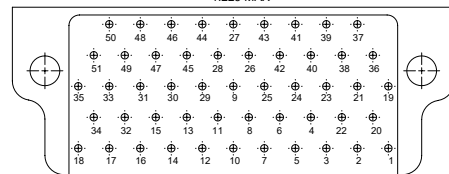
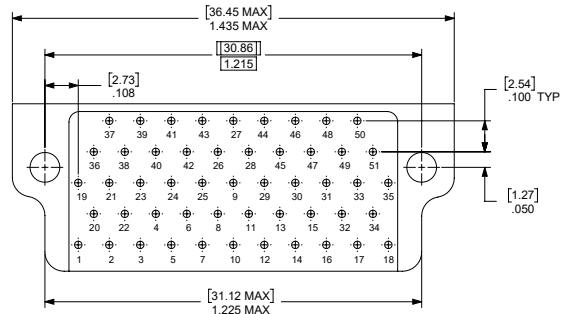
PIN



SOCKET

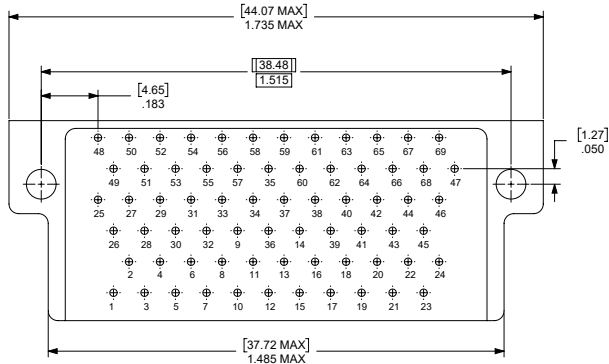


**37 CONTACTS**

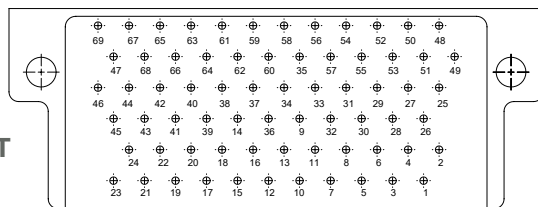


**51 CONTACTS**

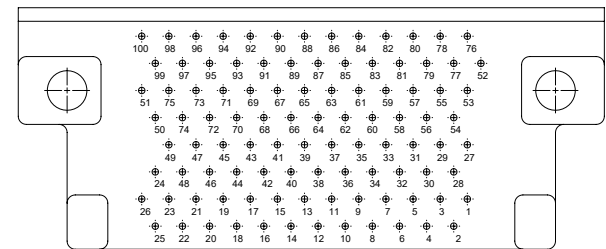
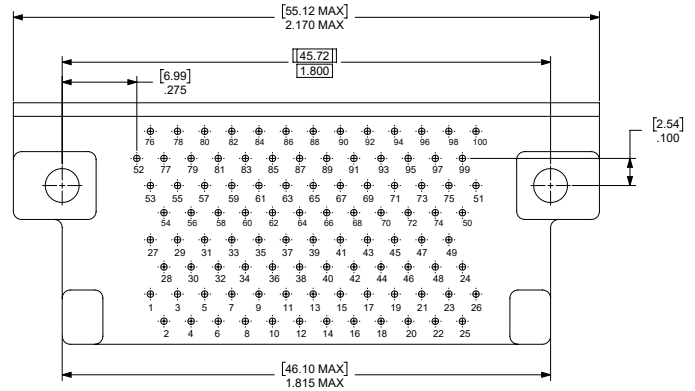
PIN



SOCKET



**69 CONTACTS**



**100 CONTACTS**

Cavity identification numbers are for reference only and does not appear on the connector.

## How to Order

## FEATURES

- Reduced flange height in comparison with standard 100 Series connectors
- Metal shells to provide RFI/EMI shielding
- Pre-wired and fully potted
- Ideal for tight spaces
- Intermateable with 101R and 108R only

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
RoHS Compliance	Connector Series	Insulated Sealing Type	Shell Finish	Connector Size	Connector Type	Wire Size (AWG)	Wire Type	Wire Color/Finish	Wire Length	Hardware (Pre-Installed)	Non Standard Length
	108	R	N	15	P-	3	E	6	F	M2-	20

### 1. RoHS Compliance

<b>E</b>	RoHS Compliant
	Blank for Non-RoHS

### 2. Connector Series

<b>108</b>	Low Profile Metal Shell
------------	-------------------------

### 3. Insulator Material

<b>R</b>	Polyphenylene Sulfide (Ryton)
----------	-------------------------------

### 4. Shell Finish

<b>A</b>	Anodize (Black)
<b>B</b>	Zinc Nickel (Black Chromate)
<b>C</b>	Cadmium (Yellow Chromate)
<b>D</b>	Olive Drab Cadmium
<b>F</b>	Chem Film
<b>N</b>	Electroless Nickel
<b>G</b>	Gold
<b>K</b>	Zinc Nickel- 48 hrs
<b>L</b>	Pure Electro-Deposited Aluminum
<b>T</b>	Nickel Teflon

### 5. Connector Size (Number of Contacts)

<b>09</b>
<b>15</b>
<b>21</b>
<b>25</b>
<b>31</b>
<b>37</b>
<b>51</b>

### 6. Connector Type

<b>P-</b>	Plug (Pin)
<b>S-</b>	Receptacle (Socket)
<b>G-</b>	Plug (Pin) with Ground Spring

### 7. Wire Size (AWG)

	Omit for Solder Cup
<b>1</b>	32
<b>2</b>	30
<b>3</b>	28
<b>4</b>	26 (M835351 STD)
<b>5</b>	25 (Solid Wire Only)
<b>6</b>	24
<b>7</b>	Special 24 AWG Solder Cup (Omit Steps 8-10)

### 8. Wire Type

	Omit for Solder Cup
<b>GENERAL APPLICATIONS:</b>	
<b>A</b>	7 Strd. per NEMA-HP3 (MIL-W-16878/4)
<b>B</b>	7 Strd. per NEMA-HP3 (Formerly MIL-W-16878/6)
<b>C</b>	19 Strd. per NEMA-HP3 (Formerly MIL-W-16878/4)
<b>D</b>	19 Strd. per NEMA-HP3 (Formerly MIL-W-16878/6)
<b>MILITARY/AEROSPACE:</b>	
<b>E</b>	Per Mil-W-22759/11 (M83513 STD)
<b>F</b>	Per Mil-W-22759/33 (Space Grade)
<b>L</b>	Solid Wire Uninsulated
<b>G</b>	04035-26A

### 9. Wire Color/Finish

	Omit for Solder Cup
<b>1</b>	All White (M83513-STD) *Off Shelf
<b>2</b>	All Yellow
<b>3</b>	Solid Wire Uninsulated, Tin Plated
<b>4</b>	Solid Wire Uninsulated, Gold plated
<b>5</b>	Color Coded per Mil-STD-68 System I
<b>6</b>	1st 10 Color Black thru White Repeated (M83513 Standard) *Off Shelf
<b>7</b>	1st 15 Colors Black thru White/Yellow Repeated (size 21+ only)
<b>8</b>	Twisted Pairs, White/Blue
<b>9</b>	Twisted Pairs, White/blue, Marked

### 10. Wire Length (inches)

	Omit for Solder Cup
<b>A</b>	18.00 (+1.00/-0.00)
<b>B</b>	36.00 (+1.00/-0.00)
<b>C</b>	72.00(+1.00/-0.00)
<b>D</b>	.500 (Solid Wire Only +0.20/-0.00)
<b>E</b>	1.00 (Solid Wire Only +0.20/-0.00)
<b>F</b>	Non-Standard Length

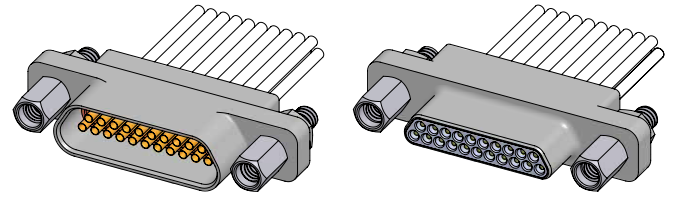
### 12. Non Standard Length

(0.109 < length < 1.00)  
e.g. 125 = .125 inches

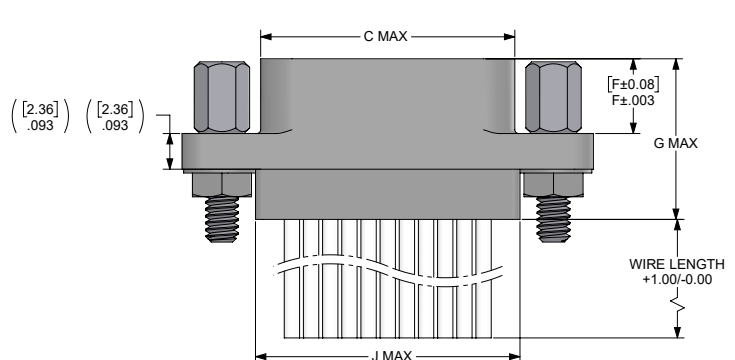
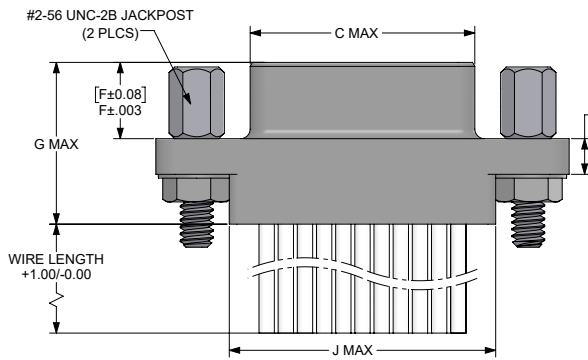
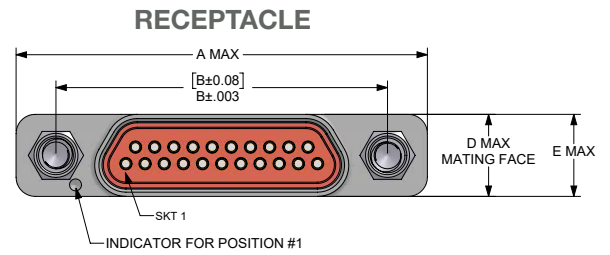
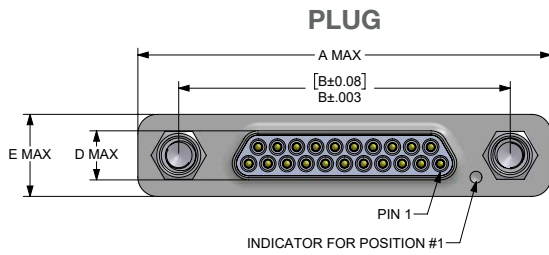
### 11. Hardware (Pre-Installed)

<b>B-</b>	Standard Mounting Holes
<b>H-</b>	Threaded Mounting Holes, #2-56
<b>D-</b>	Metric Threaded Mounting Hole, M2
<b>P-</b>	Jackpost
<b>M2-</b>	Low Profile Jackscrew, Allen Head
<b>M3-</b>	High Profile Jackscrew, Allen Head
<b>M5-</b>	Low Profile Jackscrew, Slot Head
<b>M6-</b>	High Profile Jackscrew, Slot Head
<b>L-</b>	Captive Low Profile Jackscrew
<b>K-</b>	Captive High Profile Jackscrew
<b>F-</b>	Forward Float Mount
<b>R-</b>	Reverse Float Mount

# MICRO-D LOW PROFILE CONNECTORS SERIES 108

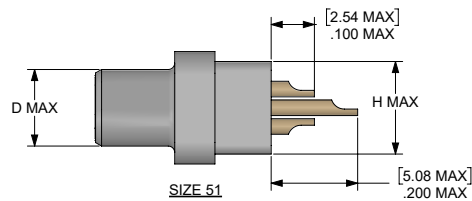
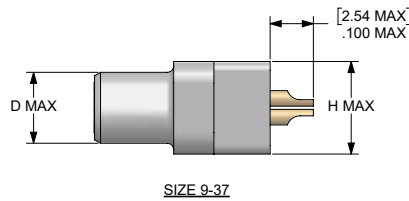


## WIRE TERMINATION



MICRO-D

## SOLDER CUP TERMINATION (PLUG/RECEPTACLE)



Dimensions are in inch(mm)

SIZE	A MAX	B ±.003 (0.76)	C MAX		D MAX		E MAX	F ±.003 (0.076)		G MAX		H MAX	J MAX
			PLUG	RCPT	PLUG	RCPT		PLUG	RCPT	PLUG	RCPT		
09	.788 (20.02)	.565 (14.35)	.292 (7.42)	.380 (9.65)								.405 (10.29)	
15	.938 (23.83)	.715 (18.16)	.442 (11.23)	.530 (13.46)								.555 (14.10)	
21	1.088 (27.64)	.865 (21.97)	.592 (15.04)	.680 (17.27)								.705 (17.91)	
25	1.188 (30.18)	.965 (24.51)	.692 (17.58)	.780 (19.81)	.134 (3.40)	.218 (5.54)	.218 (5.54)	.199 (5.05)	.180 (4.57)	.390 (9.91)	.377 (9.58)	.175 (4.45)	.805 (20.45)
31	1.338 (33.99)	1.115 (28.32)	.842 (21.39)	.930 (23.62)									.955 (24.26)
37	1.488 (37.80)	1.265 (32.13)	.992 (25.20)	1.080 (27.43)									1.105 (28.07)
51	1.438 (36.53)	1.215 (30.86)	.942 (23.93)	1.030 (26.16)	.177 (4.50)	.260 (6.60)	.260 (6.60)					.220 (5.59)	1.058 (26.87)

## How to Order

## FEATURES

- Reduced flange height in comparison with standard 100 Series CBR connectors
- Metal shell
- Solid copper 24 AWG PCB leads tin plated, and solder dipped
- Meets performance requirements of MIL-DTL-83513
- Ideal for tight spaces
- Intermateable with 101R and 108R only

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
RoHS Compliance	Connector Series	Insulator Sealing Type	Shell Finish	Connector Size	Connector Type	Termination Type	Hardware (Pre-Installed)	Threaded Insert	Lead Length (inches)	Non Standard Length
	108	R	N	25	P-	CBR	P	T	F-	125

### 1. RoHS Compliance

<b>E</b>	RoHS Compliant
	Blank for Non-RoHS

### 2. Connector Series

<b>108</b>	Low Profile Metal Shell
------------	-------------------------

### 3. Insulator/Sealing Type

<b>R</b>	Polyphenylene Sulfide (Ryton)
----------	-------------------------------

### 4. Shell Finish

<b>A</b>	Anodize (Black)
<b>B</b>	Zinc Nickel (Black Chromate)
<b>C</b>	Cadmium (Yellow Chromate)
<b>D</b>	Olive Drab Cadmium
<b>F</b>	Chem Film
<b>G</b>	Gold
<b>K</b>	Zinc Nickel- 48 hrs
<b>L</b>	Pure Electro-Deposited Aluminum
<b>N</b>	Electroless Nickel
<b>T</b>	Nickel Teflon

### 5. Connector Size (Number of Contacts)

<b>09</b>
<b>15</b>
<b>21</b>
<b>25</b>
<b>31</b>
<b>37</b>
<b>51</b>

### 6. Connector Type

<b>R-</b>	Receptacle (Socket)
<b>P-</b>	Plug (Pin)
<b>G-</b>	Plug (Pin) w/ EMI Ground Spring

### 7. Termination Type

<b>CBR</b>	Narrow Right Angle
------------	--------------------

### 8. Hardware (Pre-Installed)

<b>H</b>	Threaded Mounting Holes, #2-56
<b>D</b>	Metric Threaded Mounting Hole, M2
<b>P</b>	Jackpost
<b>PA</b>	Hex Head Rear Panel Mount Jackpost for .027" - .037" Panel Thickness
<b>PB</b>	Hex Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness
<b>PC</b>	Hex Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
<b>PD</b>	Hex Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness

### 8. Hardware (Pre-Installed)

<b>PE</b>	Hex Head RPM for .075"-.085" [1.91mm -2.16mm] Panel Thickness
<b>PF</b>	Hex Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
<b>PG</b>	Hex Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness
<b>SA</b>	Slot Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness
<b>SB</b>	Slot Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness
<b>SC</b>	Slot Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness

### 8. Hardware (Pre-Installed)

<b>SD</b>	Slot Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
<b>SE</b>	Slot Head RPM for .075"-.085" [1.91mm - 2.16mm] Panel Thickness
<b>SF</b>	Slot Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
<b>SG</b>	Slot Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness

### 9. Threaded Insert (Pre-Installed PCB Mounting Options)

	Omit for no threaded Insert
<b>T</b>	#2-56 Threaded Insert
<b>V</b>	M2 Threaded Insert

### 10. Lead Length (inches)

<b>1-</b>	.109 ± .015
<b>2-</b>	.140 ± .015
<b>3-</b>	.172 ± .015
<b>4-</b>	.250 ± .015
<b>F-</b>	Non Standard Length
<b>GOLD</b>	
<b>5-</b>	.109 ± .015
<b>6-</b>	.140 ± .015
<b>7-</b>	.172 ± .015
<b>8-</b>	.250 ± .015
<b>G-</b>	Non Standard Length

### 11. Non Standard Length

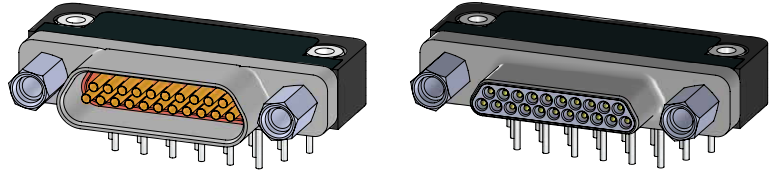
(0.109 < length < 1.00)  
e.g. 125 = .125 inches

# MICRO-D LOW PROFILE PCB CONNECTORS

## SERIES 108

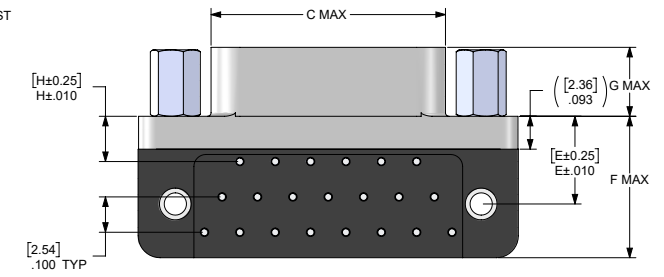
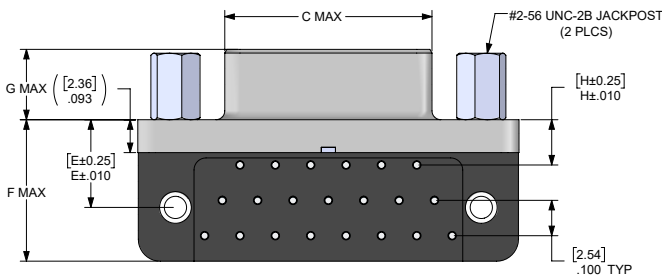
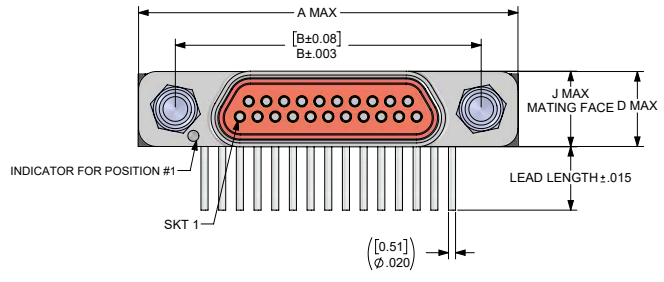
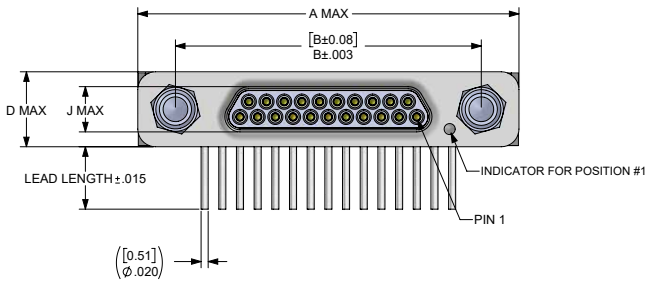
### CBR Termination

BOARD RIGHT ANGLE CONNECTOR



PLUG

RECEPTACLE



MICRO-D

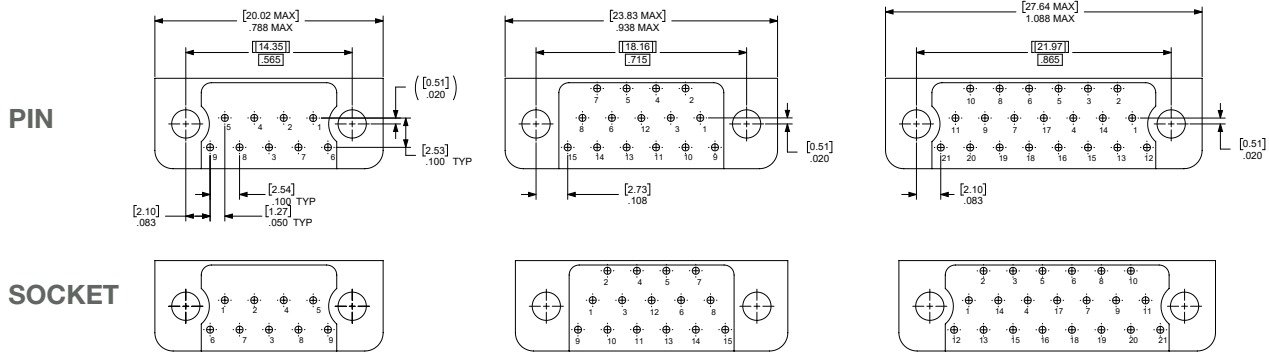
Dimensions are in inch(mm)

SIZE	A MAX	B ±.003 (0.76)	C MAX		D MAX	E ±.010 (0.25)	F MAX	G MAX		H ±.010 (0.25)	J MAX	
			PLUG	RCPT				PLUG	RCPT		PLUG	RCPT
09	.788 (20.02)	.565 (14.35)	.292 (7.42)	.380 (9.65)	.218 (5.54)	.250 (6.35)	.425 (10.80)	.202 (5.13)	.185 (4.70)	.130 (3.30)	.134 (3.40)	.218 (5.54)
15	.938 (23.83)	.715 (18.16)	.442 (11.23)	.530 (13.46)								
21	1.088 (27.64)	.865 (21.97)	.592 (15.04)	.680 (17.27)								
25	1.188 (30.18)	.965 (24.51)	.692 (17.58)	.780 (19.81)								
31	1.338 (33.99)	1.115 (28.32)	.842 (21.39)	.930 (23.62)								
37	1.488 (37.80)	1.265 (32.13)	.992 (25.20)	1.080 (27.43)								
51	1.438 (36.53)	1.215 (30.86)	.942 (23.93)	1.030 (26.16)	.260 (6.60)	.300 (7.62)	.660 (16.76)			.150 (3.81)	.177 (4.50)	.260 (6.60)



### CBR TERMINATION TYPE RIGHT ANGLE (90 DEG) LOW PROFILE PC CONFIGURATION

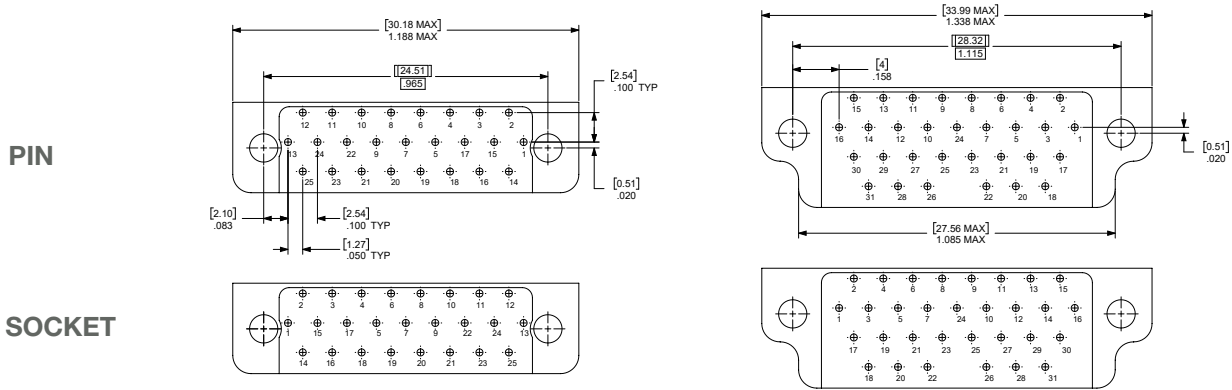
.100 (2.54) x .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)



9 CONTACTS

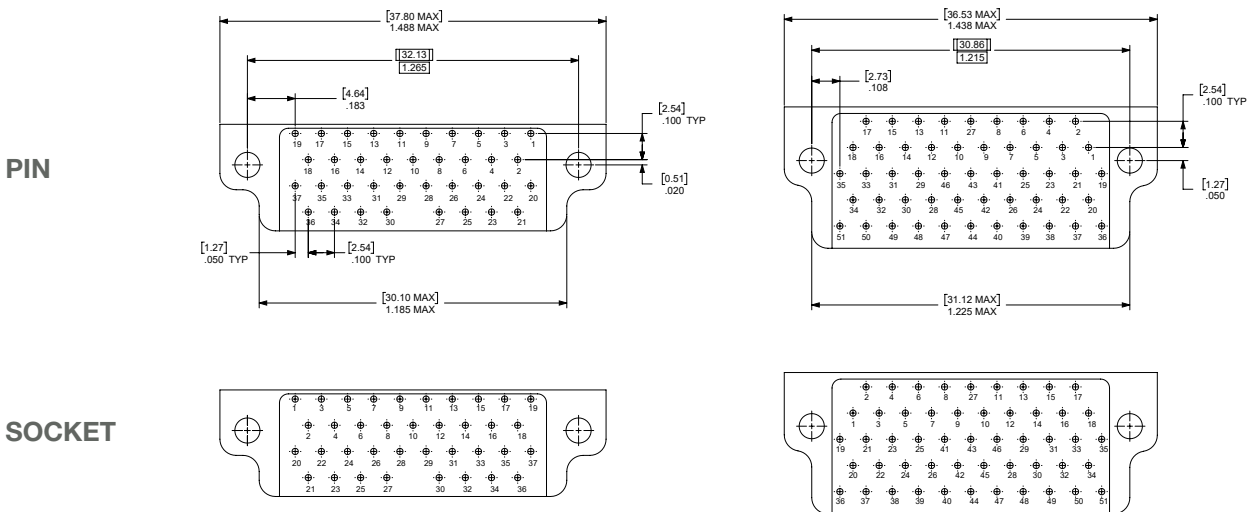
15 CONTACTS

21 CONTACTS



25 CONTACTS

31 CONTACTS



37 CONTACTS

51 CONTACTS

Cavity identification numbers are for reference only and does not appear on the connector.

# MICRO-D LOW PROFILE PCB CONNECTORS

## SERIES 118

### How to Order

### FEATURES

- Polarization is reversed from series 108 CBR type connector.
- Reduced flange height in comparison with standard 100 Series connectors.
- Solid copper 24 AWG PCB leads tin plated, and solder dipped.
- Meets performance requirements of MIL-DTL-83513
- Ideal for tight spaces

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
RoHS Compliance	Connector Series	Insulated Sealing Type	Shell Finish	Connector Size	Connector Type	Termination Type	Hardware (Pre-Installed)	Threaded Insert	Lead Length (inches)	Non Standard Length
	118	R	N	25	P-	CBR	P	T	F-	125

1. RoHS Compliance	
<b>E</b>	RoHS Compliant
	Blank for Non-RoHS

2. Connector Series	
<b>118</b>	Reversed Low Profile Metal Shell

3. Insulated Sealing Type	
<b>R</b>	Polyphenylene Sulfide (Ryton)

4. Shell Finish	
<b>A</b>	Anodize (Black)

5. Connector Size (Number of Contacts)	
<b>09</b>	
<b>15</b>	
<b>21</b>	
<b>25</b>	
<b>31</b>	
<b>37</b>	
<b>51</b>	

6. Connector Type	
<b>R-</b>	Receptacle (Socket)
<b>P-</b>	Plug (Pin)
<b>G-</b>	Plug (Pin) w/ EMI Ground Spring

7. Termination Type	
<b>CBR</b>	Narrow Right Angle PCB

<b>B</b>	Zinc Nickel (Black Chromate)
----------	------------------------------

<b>C</b>	Cadmium (Yellow Chromate)
----------	---------------------------

<b>D</b>	Olive Drab Cadmium
----------	--------------------

<b>F</b>	Chem Film
----------	-----------

<b>G</b>	Gold
----------	------

<b>K</b>	Zinc Nickel- 48 hrs
----------	---------------------

<b>L</b>	Pure Electro-Deposited Aluminum
----------	---------------------------------

<b>N</b>	Electroless Nickel
----------	--------------------

<b>T</b>	Nickel Teflon
----------	---------------

9. Threaded Insert (Pre-Installed PCB Mounting Options)	
	Omit for no threaded insert
<b>T</b>	#2-56 Threaded Insert
<b>V</b>	M2 Threaded Insert

8. Hardware (Pre-Installed)	
<b>H</b>	Threaded Mounting Holes, #2-56
<b>D</b>	Metric Threaded Mounting Hole, M2
<b>P</b>	Jackpost
<b>PA</b>	Hex Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness
<b>PB</b>	Hex Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness
<b>PC</b>	Hex Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
<b>PD</b>	Hex Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
<b>PE</b>	Hex Head RPM for .075"-.085" [1.91mm -2.16mm] Panel Thickness
<b>PF</b>	Hex Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness

8. Hardware (Pre-Installed)	
<b>PG</b>	Hex Head RPM for .067" - .077" [1.70mm - 1.96mm] Panel Thickness

<b>SA</b>	Slot Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness
-----------	---

<b>SB</b>	Slot Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness
-----------	---

<b>SC</b>	Slot Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
-----------	---

<b>SD</b>	Slot Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
-----------	---

<b>SE</b>	Slot Head RPM for .075"-.085" [1.91mm - 2.16mm] Panel Thickness
-----------	---

<b>SF</b>	Slot Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
-----------	---

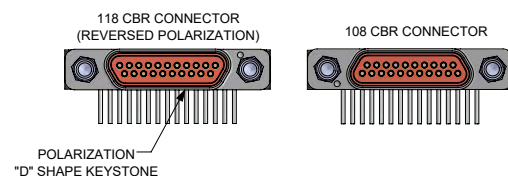
<b>SG</b>	Slot Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness
-----------	---

10. Lead Length (inches)	
<b>1-</b>	.109 ± .015
<b>2-</b>	.140 ± .015
<b>3-</b>	.172 ± .015
<b>4-</b>	.250 ± .015
<b>F-</b>	Non Standard Length

11. Non Standard Length	
(0.109 < length < 1.00) e.g. 125 = .125 inches	

<b>GOLD</b>	
<b>5-</b>	.109 ± .015
<b>6-</b>	.140 ± .015
<b>7-</b>	.172 ± .015
<b>8-</b>	.250 ± .015
<b>G-</b>	Non Standard Length

MICRO-D

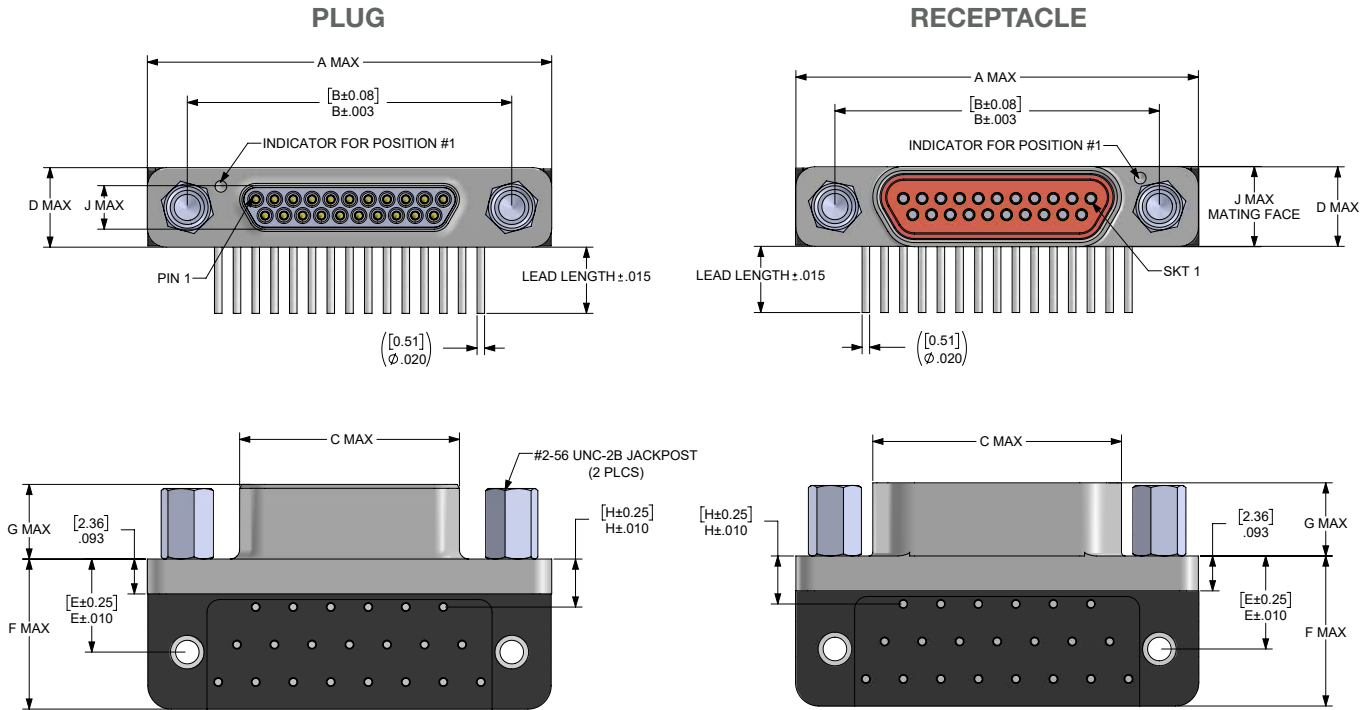
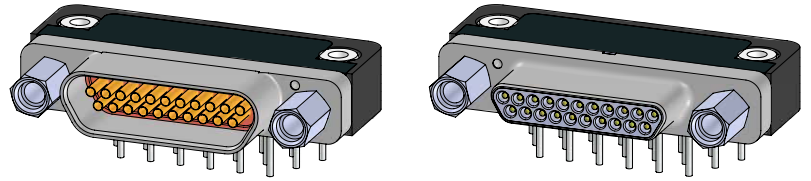


# MICRO-D LOW PROFILE PCB CONNECTORS **Amphenol CANADA**

## SERIES 118

### CBR Termination

REVERSED POLARIZATION



Dimensions are in inch(mm)

SIZE	A MAX	B ±.003 (0.076)	C MAX		D MAX	E MAX	F MAX	G MAX		H MAX	J MAX	
			PLUG	RCPT				PLUG	RCPT		PLUG	RCPT
09	.788 (20.02)	.565 (14.35)	.292 (7.42)	.380 (9.65)	.218 (5.54)	.250 (6.35)	.425 (10.80)	.202 (5.13)	.185 (4.70)	.130 (3.30)	.134 (3.40)	.218 (5.54)
15	.938 (23.82)	.715 (18.16)	.442 (11.23)	.530 (13.46)								
21	1.088 (27.64)	.865 (21.97)	.592 (15.04)	.680 (17.27)								
25	1.188 (30.18)	.965 (24.51)	.692 (17.58)	.780 (19.81)			.525 (13.34)	.150 (3.81)	.177 (4.50)	.260 (6.60)		
31	1.338 (33.98)	1.115 (28.32)	.842 (21.39)	.930 (23.62)								
37	1.488 (37.80)	1.265 (32.13)	.992 (25.20)	1.080 (27.43)								
51	1.438 (36.53)	1.215 (30.86)	.942 (23.93)	1.030 (26.16)	.260 (6.60)	.300 (7.62)	.660 (16.76)					

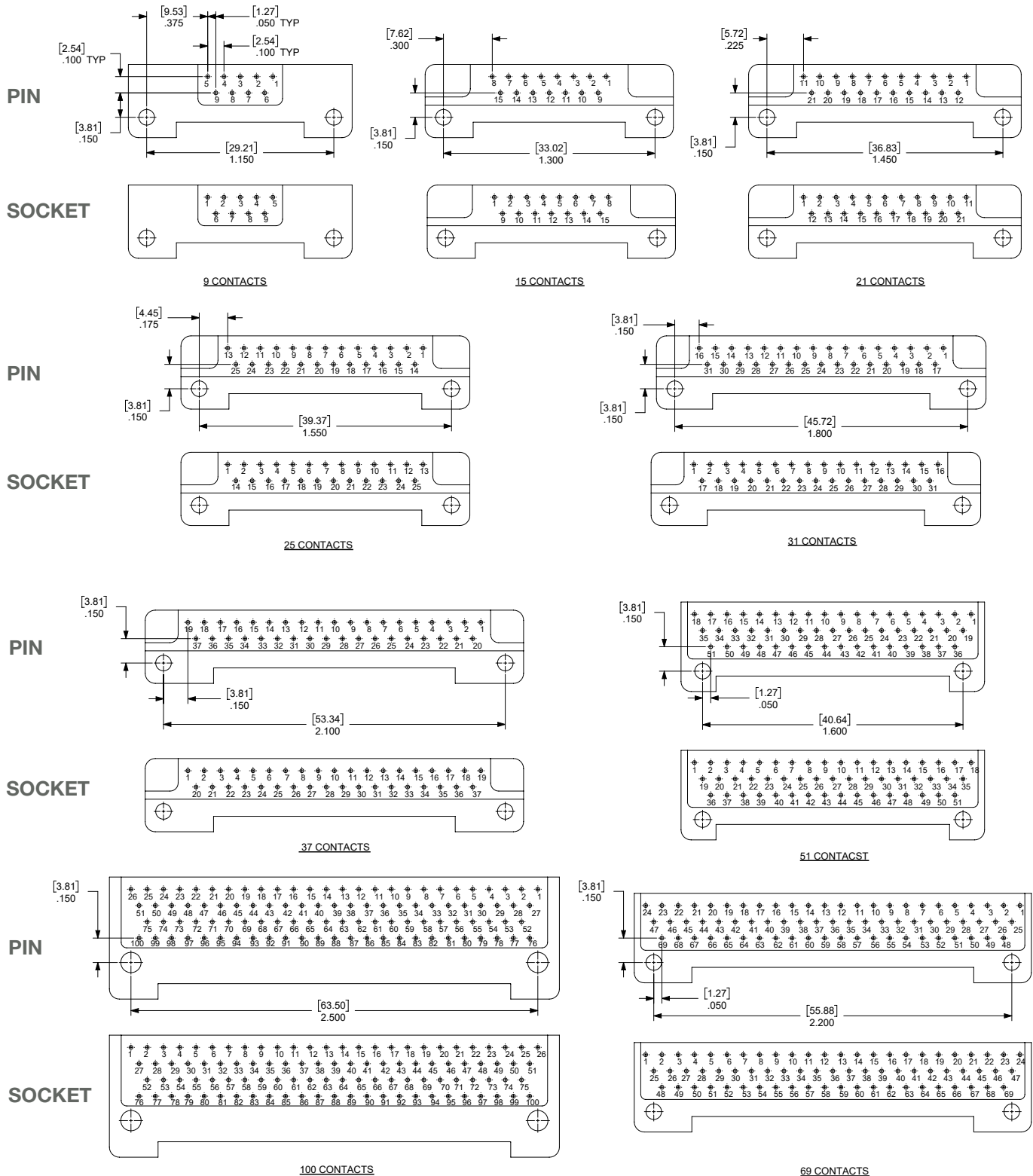
Note: In receptacle, interfacial seal not included for plastic shell

# MICRO-D LOW PROFILE PCB CONNECTORS

## SERIES 118

### RIGHT ANGLE (90 DEG) NARROW PROFILE PC CONFIGURATION

.100 (2.54) X .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)



Cavity identification numbers are for reference only and does not appear on the connector.

Contact Amphenol Canada for more information at 416-291-4401 • [www.amphenolcanada.com](http://www.amphenolcanada.com)  
 Download 2D drawings & 3D models using our online configurator.

### How to Order

### FEATURES

- Reduced flange height in comparison with standard 100 series connectors
- High-performance thermoplastic shell resistance to aggressive chemical environments
- Stable dielectric and insulating properties
- Pre-wired and fully potted
- Ideal for tight spaces

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
RoHS Compliance	Connector Series	Insulated Sealing Type	Connector Size	Connector Type	Wire Size (AWG)	Wire Type	Wire Color Finish	Wire Length	Hardware (Pre-Installed)	Non Standard Length
	101	R	25	P-	4	A	5	F	P-	48

#### 1. RoHS Compliance

<b>E</b>	RoHS Compliant
	Blank for Non-RoHS

#### 2. Connector Series

<b>101</b>	Low Profile All Plastic Shell Per M83513
------------	--

#### 3. Insulated Sealing Type

<b>R</b>	Polyphenylene Sulfide (Ryton)
----------	-------------------------------

#### 4. Connector Size (Number of Contacts)

<b>09</b>
<b>15</b>
<b>21</b>
<b>25</b>
<b>31</b>
<b>37</b>
<b>51</b>

#### 5. Connector Type

<b>P-</b>	Plug (Pin)
<b>S-</b>	Receptacle (Socket)
<b>G-</b>	Plug with Ground Spring

#### 6. Wire Size (AWG)

	Omit for Solder Cup
<b>1</b>	32
<b>2</b>	30
<b>3</b>	28
<b>4</b>	26 (M83513 Standard) *Off Shelf
<b>5</b>	25 (Solid Wire Only)
<b>6</b>	24
<b>7</b>	Special 24 AWG Solder Cup (Omit Steps 8-10)

#### 7. Wire Type

	Omit for Solder Cup
<b>GENERAL APPLICATIONS:</b>	
<b>A</b>	7 Strd. per NEMA-HP3 (MIL-W-16878/4)
<b>B</b>	7 Strd. per NEMA-HP3 (Formerly MIL-W-16878/6)
<b>C</b>	19 Strd. Per NEMA-HP3 (MIL-W-16878/4)
<b>D</b>	19 Strd. Per NEMA-HP3 (MIL-W-16878/6)
<b>MILITARY/AEROSPACE:</b>	
<b>E</b>	Per MIL-W-22759/11 (M83513 Standard)
<b>F</b>	Per MIL-W-22759/33 (Space Grade)
<b>L</b>	Solid Wire Uninsulated
<b>G</b>	04035-26A

#### 8. Wire Color / Finish

	Omit for Solder Cup
<b>1</b>	All White (M83513 Standard) *Off Shelf
<b>2</b>	All Yellow
<b>3</b>	Solid Wire Uninsulated, Tin Plated
<b>4</b>	Solid Wire Uninsulated, Gold Plated
<b>5</b>	Color coded per Mil-STD-681, System 1
<b>6</b>	1st 10 Colors black thru white, repeated (M83513 Standard) *Off shelf
<b>7</b>	1st 15 colors black thru white/Yellow Repeated (Size 21+ Only)
<b>8</b>	Twisted Pairs, White/Blue
<b>9</b>	Twisted Pairs, White/Blue, Marked

#### 9. Wire Length (Inches)

	Omit for Solder Cup
<b>A</b>	.18.00 (+1.00/-0.00)
<b>B</b>	.36.00 (+1.00/-0.00)
<b>C</b>	.72.00 (+1.00/-0.00)
<b>D</b>	0.500 (Solid Wire only +0.20/-0.00)
<b>E</b>	1.00 (Solid wire only +0.20/-0.00)
<b>F</b>	Non-Standard Length

#### 10. Hardware (Pre-Installed)

<b>B-</b>	Standard Mounting Holes
<b>H-</b>	Threaded Mounting Holes, #2-56
<b>D-</b>	Metric Threaded Mounting Hole, M2
<b>P-</b>	Jackpost
<b>M2-</b>	Low Profile Jackscrew, Allen Head
<b>M3-</b>	High Profile Jackscrew, Allen Head
<b>M5-</b>	Low Profile Jackscrew, Slot Head
<b>M6-</b>	High Profile Jackscrew, Slot Head
<b>L-</b>	Captive Low Profile Jackscrew
<b>K-</b>	Captive High Profile Jackscrew
<b>F-</b>	Forward Float Mount
<b>R-</b>	Reverse Float Mount

#### 11. Non Standard Length

(0.109 < length < 1.00)
e.g. 125 = .125 inches

# MICRO-D LOW PROFILE CONNECTORS

## SERIES 101

QUALIFIED TO M83513/06 THRU /09

### SOLDER CUP TERMINATION

1. Connector Series	2. Specification Sheet	3. Insert Arrangement
M83513/	06-	A

1. Connector Series		2. Specification Sheet		3. Insert Arrangement	
<b>M83513/</b>	M83513	<b>06-</b>	Plug (Pin)	<b>A</b>	9
		<b>07-</b>	Receptacles (Socket)	<b>B</b>	15
				<b>C</b>	21
				<b>D</b>	25
				<b>E</b>	31
				<b>F</b>	37
				<b>G</b>	51
Size 69 & 100 not available per M83513					

### CRIMP TERMINATION

1. Connector Series	2. Specification Sheet	3. Insert Arrangement	4. Wire Type
M83513/	08-	F	01

1. Connector Series		2. Specification Sheet		3. Insert Arrangement	
<b>M83513/</b>	M83513	<b>08-</b>	Plug (Pin)	<b>A</b>	9
		<b>09-</b>	Receptacles (Socket)	<b>B</b>	15
				<b>C</b>	21
				<b>D</b>	25
				<b>E</b>	31
				<b>F</b>	37
				<b>G</b>	51
Size 69 & 100 not available per M83513					

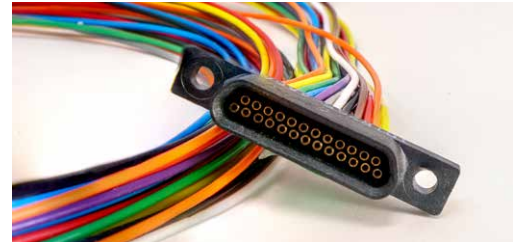
  

4. Wire Type (Inches +1.00/-0.00)		4. Wire Type (Inches +1.00/-0.00)	
<b>01</b>	M22759/11-26-9, 18"	<b>10</b>	M22759/33-26-9, 36"
<b>02</b>	M22759/11-26-9, 36"	<b>11</b>	M22759/33-26-(*), 18"
<b>03</b>	M22759/11-26-(*), 18"	<b>12</b>	M22759/33-26-(*), 36"
<b>04</b>	M22759/11-26-(*), 36"	<b>13</b>	M22759/11-26-9, 72"
<b>05</b>	A-A-59551, Type S, 25 AWG, except shall be gold plated 10 micro-inches; 0.5"	<b>14</b>	M22759/11-26-(*), 72"
<b>06</b>	A-A-59551, TYPE S, 25 AWG, except shall be gold plated 10 micro-inches; 1.0"	<b>15</b>	M22759/33-26-9, 72"
<b>07</b>	A-A-59551, TYPE S, 25 AWG, tin plated 100 micro-inches; 0.5"	<b>16</b>	M22759/33-26(*), 72"
<b>08</b>	A-A-59551, TYPE S, 25 AWG, tin plated 100 micro-inches; 1.0"	<b>17</b>	04035-26A-9, 18"
<b>09</b>	M22759/33-26-9, 18"	<b>18</b>	04035-26A-9, 36"
		<b>19</b>	04035-26A-9, 72"
		<b>20</b>	04035-26A-(*), 18"
		<b>21</b>	04035-26A-(*), 36"
		<b>22</b>	04035-26A-(*), 72"

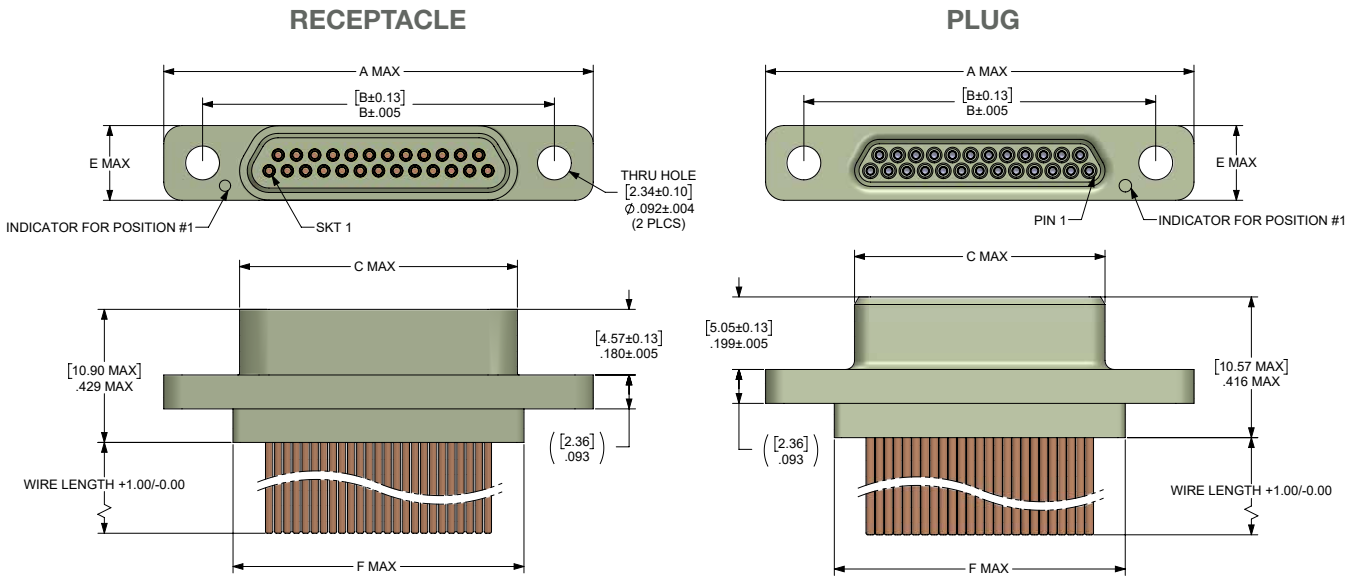
NOTE: Mounting and mating hardware to be ordered separately per M83513

MICRO-D

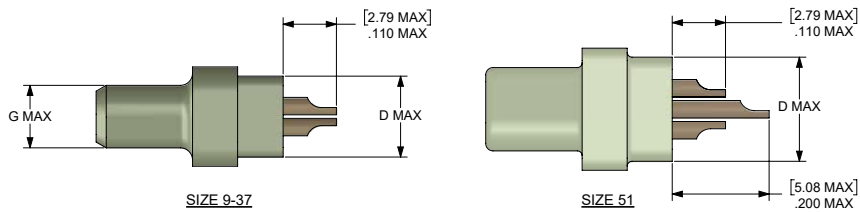




### WIRE TERMINATION: M83513/08 & /09



### SOLDER CUP TERMINATION PLUG/RECEPTACLE: M83513/06 & /07



Dimensions are in inch(mm)

SIZE	A MAX	B ±.005 (0.13)	C MAX		D MAX	E MAX	F MAX	G MAX	
			PLUG	RCPT				PLUG	RCPT
09	.788 (20.02)	.565 (14.35)	.292 (7.42)	.380 (9.65)	.173 (4.39)	.218 (5.54)	.408 (10.36)	.134 (3.40)	.218 (5.54)
15	.938 (23.82)	.715 (18.16)	.442 (11.23)	.530 (13.46)			.558 (14.17)		
21	1.088 (27.64)	.865 (21.97)	.592 (15.04)	.680 (17.27)			.708 (17.98)		
25	1.188 (30.18)	.965 (24.51)	.692 (17.58)	.780 (19.81)			.808 (20.56)		
31	1.338 (33.98)	1.115 (28.32)	.842 (21.39)	.930 (23.62)			.958 (24.33)		
37	1.488 (37.80)	1.265 (32.13)	.992 (25.20)	1.080 (27.43)	1.108 (28.14)				
51	1.438 (36.52)	1.215 (30.86)	.942 (23.93)	1.030 (26.16)	.220 (5.59)	.260 (6.60)	1.058 (26.87)	.177 (4.49)	.260 (6.60)

Note: In receptacle, interfacial seal not included for plastic shell

# MICRO-D LOW PROFILE PCB CONNECTORS

## SERIES 101

### How to Order

### FEATURES

- Reduced flange height in comparison with standard 100 PCB connectors
- High-performance thermoplastic shell resistance to aggressive chemical environments
- Stable dielectric and insulating properties
- Available in straight and right angle termination style
- Solid copper 24 AWG PCB leads, Tin plated, and solder dipped
- Ideal for tight spaces

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
RoHS Compliance	Connector Series	Insulated Sealing Type	Connector Size	Connector Type	Termination Type	Hardware (Pre-Installed)	Threaded Insert	Lead Length (inches)	Non Standard Length
E	101	R	25	P-	BR	P	T	F-	125

#### 1. RoHS Compliance

<b>E</b>	RoHS Compliant
	Blank for Non-RoHS

#### 2. Connector Series

<b>101</b>	Low Profile all Plastic Shell per M8513
------------	---

#### 3. Insulated Sealing Type

<b>R</b>	Polyphenylene Sulfide (Ryton)
----------	-------------------------------

#### 4. Connector Size (Number of Contacts)

<b>09</b>
<b>15</b>
<b>21</b>
<b>25</b>
<b>31</b>
<b>37</b>
<b>51</b>

#### 5. Connector Type

<b>P-</b>	Plug (Pin)
<b>S-</b>	Receptacle (Socket)
<b>G-</b>	Plug with Ground Spring

#### 6. Termination Type

<b>BS</b>	Straight PCB per M83513/22-/27
<b>BR</b>	Right Angle PCB per M83513 /16- /21
<b>CBR</b>	Narrow Right Angle PCB (Dimension same as M83513/10 - /15)

#### 7. Hardware (Pre-Installed)

<b>H</b>	Threaded Mounting Holes, #2-56
<b>D</b>	Metric Threaded Mounting Hole, M2
<b>P</b>	Jackpost
<b>PA</b>	Hex Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness

#### 8. Threaded Insert (Pre-Installed PCB Mounting Options)

	Omit for no threaded insert
<b>T</b>	#2-56 Threaded Insert
<b>V</b>	M2 Threaded Insert

#### 9. Lead Length (inches)

<b>1-</b>	.109 ± .015
<b>2-</b>	.140 ± .015
<b>3-</b>	.172 ± .015
<b>4-</b>	.250 ± .015
<b>F-</b>	Non Standard Length
<b>GOLD</b>	
<b>5-</b>	.109 ± .015
<b>6-</b>	.140 ± .015
<b>7-</b>	.172 ± .015
<b>8-</b>	.250 ± .015
<b>G-</b>	Non Standard Length

#### 7. Hardware (Pre-Installed)

<b>SC</b>	Slot Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
<b>SD</b>	Slot Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
<b>SE</b>	Slot Head RPM for .075"-.085" [1.91mm - 2.16mm] Panel Thickness
<b>SF</b>	Slot Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
<b>SG</b>	Slot Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness
<b>PB</b>	Hex Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness
<b>PC</b>	Hex Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
<b>PD</b>	Hex Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
<b>PE</b>	Hex Head RPM for .075"-.085" [1.91mm -2.16mm] Panel Thickness
<b>PF</b>	Hex Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
<b>PG</b>	Hex Head RPM for .067"- .077" [1.70mm - 1.96mm] Panel Thickness
<b>SA</b>	Slot Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness
<b>SB</b>	Slot Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness

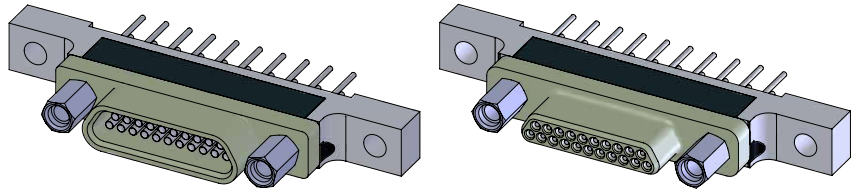
#### 10. Non Standard Length

(0.109 < length < 1.00)  
e.g. 125 = .125 inches

MICRO-D

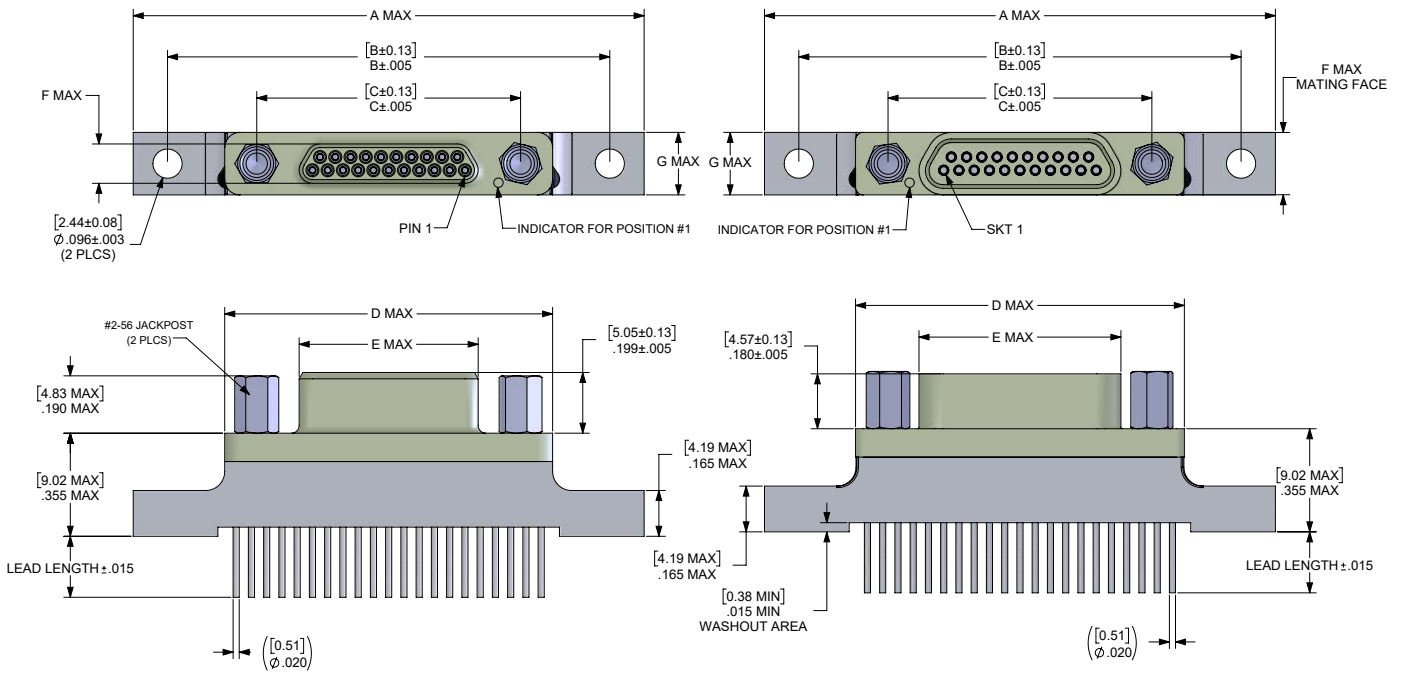
### BS Termination

BOARD STRAIGHT CONNECTOR



**PLUG**

**RECEPTACLE**



Refer to page 26 for straight PC configurations.

Dimensions are in inch(mm)

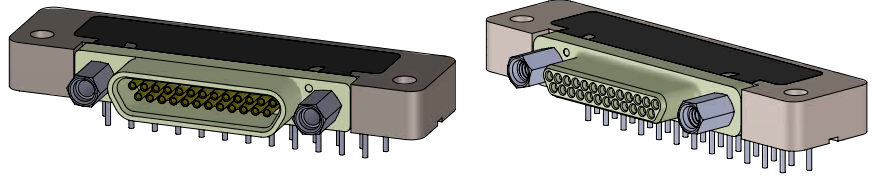
SIZE	A MAX	B ±.007 (0.18)	C ±.005 (0.13)	D MAX	E MAX		F MAX		G MAX
					PLUG	RCPT	PLUG	RCPT	
09	1.390 (35.31)	1.150 (29.21)	.565 (14.35)	.788 (20.02)	.292 (7.42)	.380 (9.65)	.134 (3.40)	.218 (5.54)	.218 (5.54)
15	1.390 (35.31)	1.150 (29.21)	.715 (18.16)	.938 (23.83)	.442 (11.23)	.530 (13.46)			
21	1.690 (42.93)	1.450 (36.83)	.865 (21.97)	1.088 (27.64)	.592 (15.04)	.680 (17.27)			
25	1.740 (44.20)	1.500 (38.10)	.965 (24.51)	1.188 (30.18)	.692 (17.58)	.780 (19.81)			
31	2.040 (51.82)	1.800 (45.72)	1.115 (28.32)	1.338 (33.99)	.842 (21.39)	.930 (23.62)			
37	2.340 (59.44)	2.100 (53.34)	1.265 (32.13)	1.488 (37.80)	.992 (25.20)	1.080 (27.43)			
51	2.270 (67.66)	2.000 (50.80)	1.215 (30.86)	1.438 (36.53)	.942 (23.93)	1.030 (26.16)			

Note: In receptacle, interfacial seal not included for plastic shell

# MICRO-D LOW PROFILE PCB CONNECTORS SERIES 101

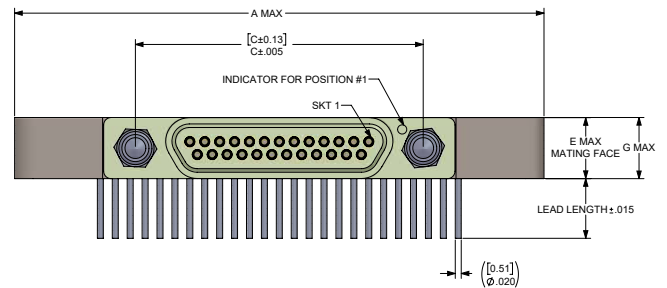
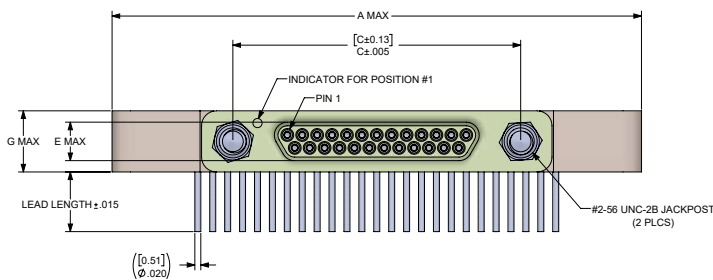
## BR Termination

BOARD RIGHT ANGLE CONNECTOR

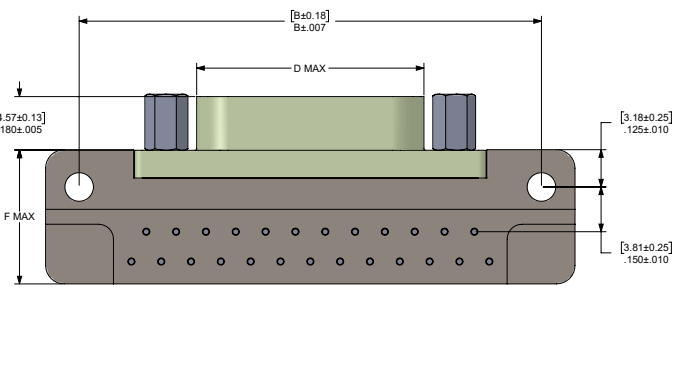
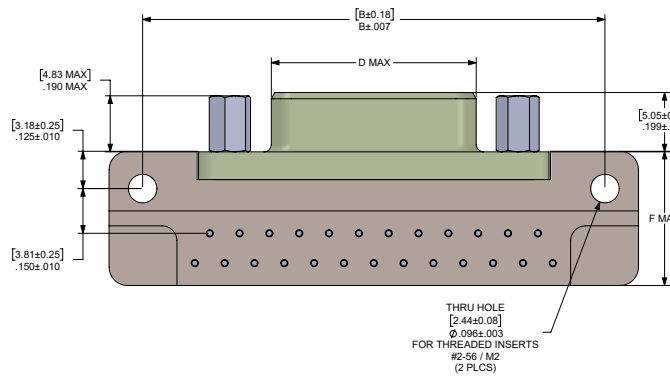


PLUG

RECEPTACLE



MICRO-D



Refer to page 24 for right angle (90 DEG) PC configurations.

Dimensions are in inch(mm)

SIZE	A MAX	±.007 (0.18)	±.005 (0.13)	D MAX		E MAX		F MAX	G MAX
				PLUG	RCPT	PLUG	RCPT		
09	1.390 (35.31)	1.150 (29.21)	.565 (14.35)	.292 (7.42)	.380 (9.65)	.134 (3.40)	.218 (5.54)	.455 (11.56)	.218 (5.54)
15	1.540 (39.12)	1.300 (33.02)	.715 (18.16)	.442 (11.23)	.530 (13.46)				
21	1.690 (42.93)	1.450 (36.83)	.865 (21.97)	.592 (15.04)	.680 (17.27)				
25	1.790 (45.47)	1.550 (39.37)	.965 (24.51)	.692 (17.58)	.780 (19.81)				
31	2.040 (51.82)	1.800 (45.72)	1.115 (28.32)	.842 (21.39)	.930 (23.62)				
37	2.340 (59.44)	2.100 (53.34)	1.265 (32.13)	.992 (25.20)	1.080 (27.43)	.177 (4.49)	.260 (6.60)	.565 (14.35)	.260 (6.60)
51	1.875 (47.63)	1.600 (40.64)	1.215 (30.86)	.942 (23.93)	1.030 (26.16)				

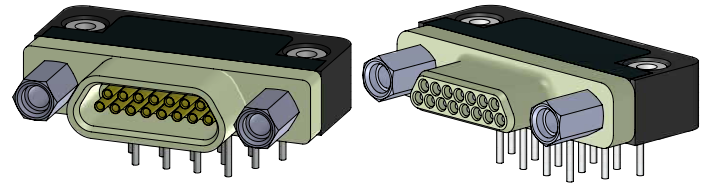
Note: In receptacle, interfacial seal not included for plastic shell

# MICRO-D LOW PROFILE PCB CONNECTORS **Amphenol**CANADA

## SERIES 101

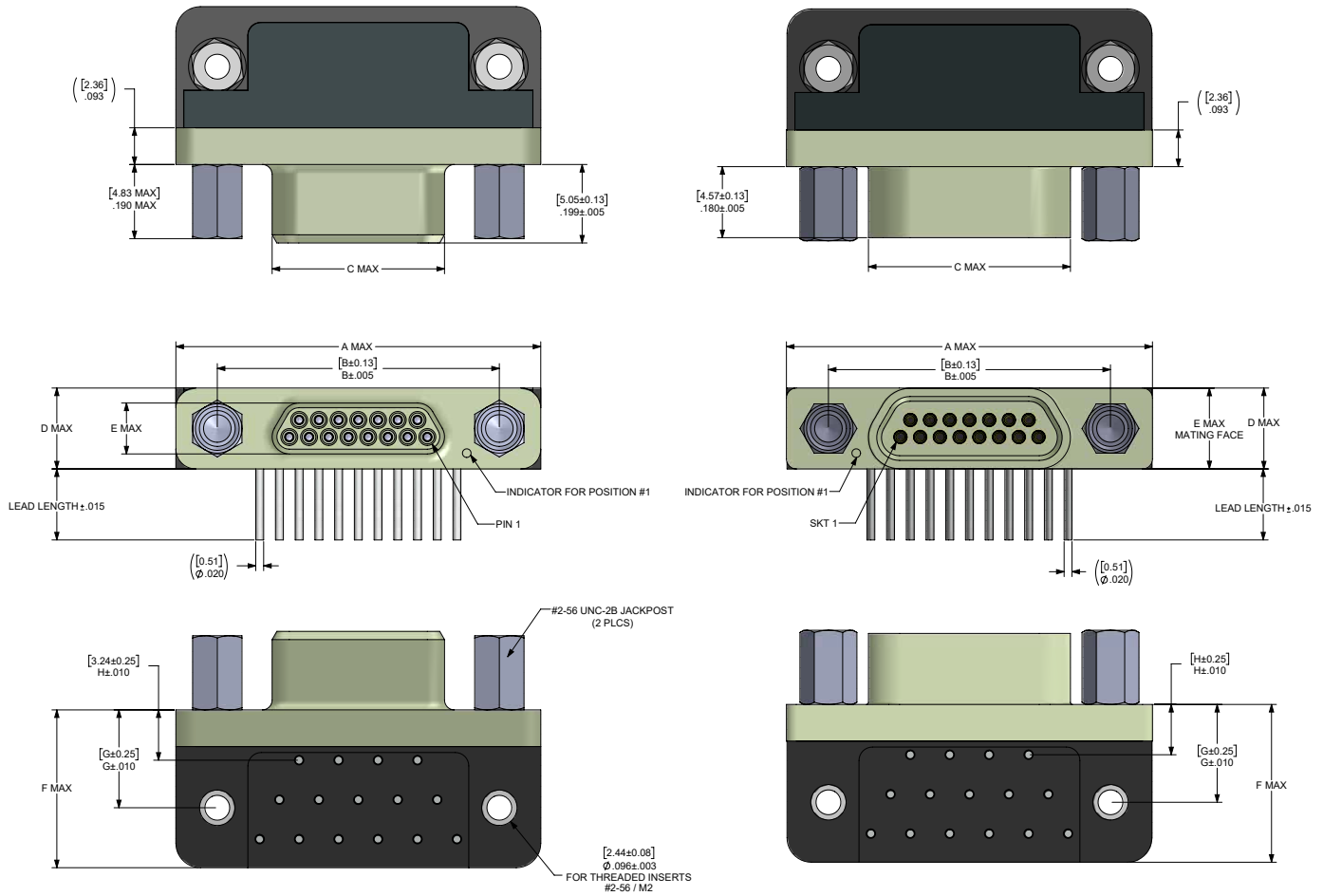
### CBR Termination

BOARD RIGHT ANGLE CONNECTOR



**PLUG**

**RECEPTACLE**



Refer to page 19 for right angle (90 DEG) low profile PC configurations.

Dimensions are in inch(mm)

SIZE	A MAX	B ±.005 (0.13)	C MAX		D MAX	E MAX		F MAX	G ±.010 (0.25)	H
			PLUG	RCPT		PLUG	RCPT			
09	.788 (20.02)	.565 (14.35)	.292 (7.42)	.380 (9.65)	.218 (5.54)	.134 (3.40)	.218 (5.54)	.420 (10.67)	.250 (6.35)	.230 (5.84)
15	.938 (23.83)	.715 (18.16)	.442 (11.23)	.530 (13.46)						
21	1.088 (27.64)	.865 (21.97)	.592 (15.04)	.680 (17.27)						
25	1.188 (30.18)	.965 (24.51)	.692 (17.58)	.780 (19.81)				.520 (13.21)		
31	1.338 (33.98)	1.115 (28.32)	.842 (21.39)	.930 (23.62)						
37	1.488 (37.80)	1.265 (32.13)	.992 (25.20)	1.080 (27.43)						
51	1.438 (36.52)	1.215 (30.86)	.942 (23.93)	1.030 (26.16)	.220 (6.60)	.177 (4.49)	.260 (6.60)	.650 (16.51)	.300 (7.62)	.150 (3.81)

Note: In receptacle, interfacial seal not included for plastic shell

# MICRO-D O-RING CONNECTORS

## SERIES 107

### How to Order

### FEATURES

- Insulated or conductive O-Ring supplied
- Pre-wired and fully potted
- Ground spring to improve EMI protection (Optional)
- Metal shells to provide RFI/EMI shielding

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
RoHS Compliance	Connector Series	Insulator Material	Shell Finish	Connector Size	Connector Type	Wire Size (AWG)	Wire Type	Wire Color/Finish	Wire Length (inches +1.00/-0.00)	Hardware (Pre-Installed)	Non-STD Length
	107	R	N	51	P-	6	E	5	A	PD-	125

#### 1. RoHS Compliance

<b>E</b>	RoHS Compliant
	Blank for Non-RoHS

#### 2. Connector Series

<b>107</b>	Micro-D O-Ring Series
------------	-----------------------

#### 3. Insulator Material

	Polyphenylene Sulfide (Ryton)
--	-------------------------------

#### 4. Shell Finish

<b>A</b>	Anodize (Black)
<b>B</b>	Zinc Nickel (Black Chromate)
<b>C</b>	Cadmium (Clear)
<b>D</b>	Olive Drab Cadmium
<b>F</b>	Chem Film
<b>G</b>	Gold
<b>K</b>	Zinc Nickel- 48 hrs
<b>L</b>	Pure Electro-Deposited Aluminum
<b>N</b>	Electroless Nickel
<b>T</b>	Nickel Teflon

#### 5. Connector Size (Number of Contacts)

<b>09</b>
<b>15</b>
<b>21</b>
<b>25</b>
<b>31</b>
<b>37</b>
<b>51</b>
<b>69</b>
<b>100</b>

#### 6. Connector Type

<b>S-</b>	Receptacle (Socket)
<b>P-</b>	Plug (Pin)
<b>G-</b>	Plug with Ground Spring

#### R Sealing O-Ring

<b>C</b>	Conductive O-Ring
<b>H</b>	Sealed to 10 <sup>-5</sup> CC/ATM Helium

#### 7. Wire Size (AWG)

	Omit for Solder Cup
<b>4</b>	26 (M835351 STD)
<b>5</b>	25 (Solid Wire Only)
<b>6</b>	24

#### 8. Wire Type

	Omit for Solder Cup
--	---------------------

#### GENERAL APPLICATIONS:

<b>A</b>	7 Strd. per NEMA-HP3 [MIL-W-16878/4]
<b>B</b>	7 Strd. per NEMA-HP3 (Formerly MIL-W-16878/6)
<b>C</b>	19 Strd. Per NEMA-HP3 (MIL-W-16878/4)
<b>D</b>	19 Strd. Per NEMA-HP3 (MIL-W-16878/6)

#### MILITARY/AEROSPACE:

<b>E</b>	Per MIL-W-22759/11 (M83513 Standard)
<b>F</b>	Per MIL-W-22759/33 (Space Grade)
<b>L</b>	Solid Wire Uninsulated
<b>G</b>	04035-26A

#### 9. Wire Color/Finish

	Omit for Solder Cup
<b>1</b>	All White (M83513-STD)
<b>2</b>	All Yellow
<b>3</b>	Solid Wire Uninsulated, Tin Plated
<b>4</b>	Solid Wire Uninsulated, Gold plated
<b>5</b>	Color Coded Per Mil-Standard-68 System I
<b>6</b>	1st 10 Color Black thru White Related (M83513 Standard)

#### 10. Wire Length (Inches)

	Omit for Solder Cup
<b>A</b>	18.00 (+1.00/-0.00)
<b>B</b>	36.00 (+1.00/-0.00)
<b>C</b>	72.00 (+1.00/-0.00)
<b>D</b>	0.50 (+0.20/-0.00 Solid wire only)
<b>E</b>	1.00 (+0.20/-0.00 Solid wire only)
<b>F</b>	Non-Standard Length

#### 11. Hardware (Pre-Installed)

<b>H-</b>	Threaded Insert (#2-56 for Size 9-69, #4-40 for Size 100)
<b>D-</b>	Metric Threaded Insert (M2 for size 9-69, M3 for size 100)
<b>PA-</b>	Hex Head Rear Panel Mount Jackpost for .027" - .037" (.68mm - .94mm) Panel Thickness
<b>PB-</b>	Hex Head RPM for .042" - .052" (1.06mm - 1.32mm) Panel Thickness

#### 11. Hardware (Pre-Installed)

<b>PC-</b>	Hex Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
<b>PG-</b>	Hex Head RPM for .067" - .077" [1.70mm - 1.96mm] Panel Thickness
<b>PD-</b>	Hex Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
<b>PE-</b>	Hex Head RPM for .075"-.085" [1.91mm -2.16mm] Panel Thickness

#### 11. Hardware (Pre-Installed)

<b>PF-</b>	Hex Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
<b>SA-</b>	Slot Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness
<b>SB-</b>	Slot Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness
<b>SC-</b>	Slot Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
<b>SG-</b>	Slot Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness
<b>SD-</b>	Slot Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
<b>SE-</b>	Slot Head RPM for .075"-.085" [1.91mm - 2.16mm] Panel Thickness
<b>SF-</b>	Slot Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness

#### 12. Non Standard Length

	Stranded Wire E.G. 1 = 1.00", 100 = 100.00"
	Solid Wire (.109" < Length < 1.00") E.G. 110 = .110", 999 = .999"

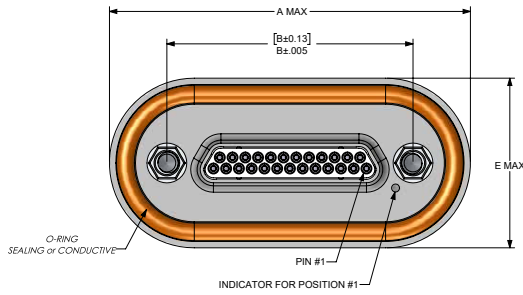
MICRO-D



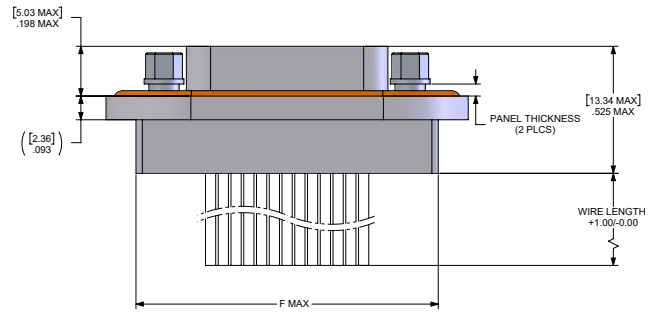
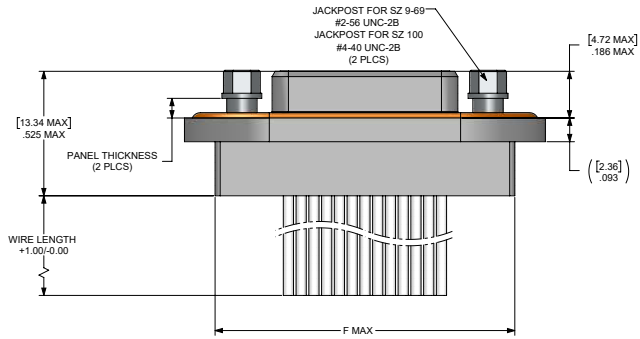
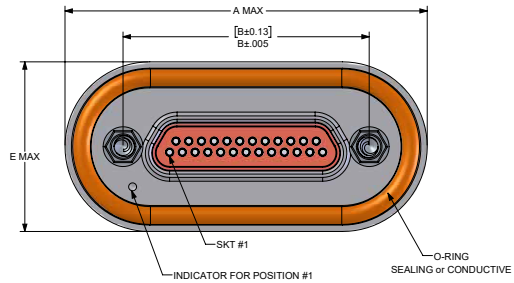
## WIRE TERMINATION:



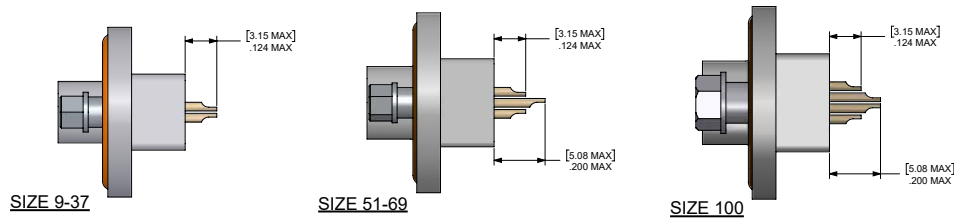
### PLUG



### RECEPTACLE



## SOLDER CUP TERMINATION PLUG/RECEPTACLE



Dimensions are in inch(mm)

SIZE	A MAX	B ±.005 (0.13)	E MAX	F MAX
09	1.025 (26.04)	.565 (14.35)	.675 (17.14)	.785 (19.94)
15	1.225 (31.11)	.715 (18.16)		.935 (23.75)
21	1.325 (33.66)	.865 (21.97)		1.085 (27.56)
25	1.425 (36.20)	.965 (24.51)		1.185 (30.10)
31	1.545 (39.24)	1.115 (28.32)		1.335 (33.91)
37	1.725 (43.82)	1.265 (32.13)	.715 (18.16)	1.485 (37.72)
51	1.695 (43.05)	1.215 (30.86)		1.435 (36.45)
69	1.995 (50.67)	1.515 (38.48)		1.735 (44.07)
100	2.375 (60.33)	1.800 (45.72)	.765 (19.43)	2.170 (55.12)

# MICRO-D PCB O-RING CONNECTORS

## SERIES 107

### How to Order

### FEATURES

- Insulated or conductive O-Ring supplied
- Solid copper 24 AWG PCB leads, Tin plated, and solder dipped
- Ground spring to improve EMI protection (Optional)

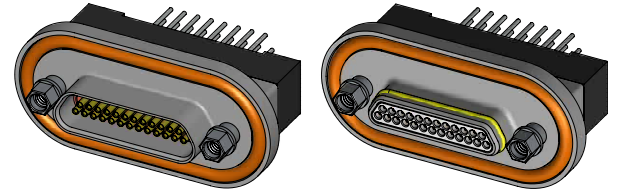
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
RoHS Compliance	Connector Series	Insulator Sealing Type	Shell Finish	Connector Size	Connector Type	Termination Type	Hardware (Pre-Installed)	Threaded Insert	Lead Length (inches)	Non Standard Length
	107	R	N	25	G-	H6	PD	T	F-	125

MICRO-D

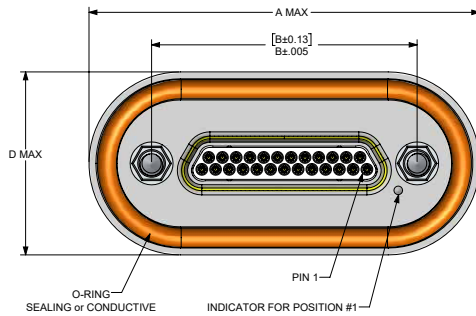
1. RoHS Compliance		2. Connector Series		3. Insulator Sealing Type		4. Shell Finish	
<b>E</b>	RoHS Compliant	<b>107</b>	Micro-D O-Ring Series	Polyphenylene Sulfide (Ryton)		<b>A</b>	Anodize (Black)
	Blank for Non-RoHS			<b>R</b>	Sealing O-Ring	<b>B</b>	Zinc Nickel (Black Chromate)
				<b>C</b>	Conductive O-Ring	<b>C</b>	Cadmium (Yellow Chromate)
				<b>H</b>	Sealing to 10 <sup>-5</sup> CC/ATM Helium	<b>D</b>	Olive Drab Cadmium
						<b>F</b>	Chem Film
						<b>G</b>	Gold
						<b>K</b>	Zinc Nickel- 48 hrs
						<b>L</b>	Pure Electro-Deposited Aluminum
						<b>N</b>	Electroless Nickel
						<b>T</b>	Nickel Teflon
5. Connector Size (Number of Contacts)		6. Connector Type		7. Termination Type		9. Threaded Insert (Pre-Installed PCB Mounting Options)	
<b>09</b>		<b>S-</b>	Receptacle (Socket)	<b>CBR</b>	Narrow Right Angle	<b>T</b>	#2-56 Threaded Insert (Size 9-69)
<b>15</b>		<b>P-</b>	Plug (Pin)	<b>HBR</b>	High Density CBR	<b>U</b>	#4-40 Threaded Insert (Size 100 Only)
<b>21</b>		<b>G-</b>	Plug (Pin) w/ EMI Ground Spring	<b>C6</b>	Straight PCB	<b>V</b>	M2 Threaded Insert (Size 9-69)
<b>25</b>				<b>H6</b>	High Density Straight PCB	<b>Z</b>	M3 Threaded Insert (Size 100 Only)
<b>31</b>							
<b>37</b>							
<b>51</b>							
<b>69</b>							
<b>100</b>							
8. Hardware (Pre-Installed)		8. Hardware (Pre-Installed)		10. Lead Length (inches)		11. Non Standard Length	
<b>H</b>	Threaded mounting hole (#2-56 for Size 9-69, #4-40 for Size 100)	<b>PF</b>	Hex Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness	<b>1-</b>	.109 ± .015	<b>GOLD</b>	
<b>D</b>	Metric Threaded Mounting Hole, M2 (9-69), M3 (Size 100)	<b>PG</b>	Hex Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness	<b>2-</b>	.140 ± .015	<b>5-</b>	.109 ± .015
<b>PA</b>	Hex Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness	<b>SA</b>	Slot Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness	<b>3-</b>	.172 ± .015	<b>6-</b>	.140 ± .015
<b>PB</b>	Hex Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness	<b>SB</b>	Slot Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness	<b>4-</b>	.250 ± .015	<b>7-</b>	.172 ± .015
<b>PC</b>	Hex Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness	<b>SC</b>	Slot Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness	<b>F-</b>	Non Standard Length	<b>8-</b>	.250 ± .015
<b>PD</b>	Hex Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness	<b>SD</b>	Slot Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness			<b>G-</b>	Non Standard Length
<b>PE</b>	Hex Head RPM for .075"-.085" [1.91mm -2.16mm] Panel Thickness	<b>SE</b>	Slot Head RPM for .075"-.085" [1.91mm - 2.16mm] Panel Thickness				
		<b>SF</b>	Slot Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness				
		<b>SG</b>	Slot Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness				

## C6/H6 Termination

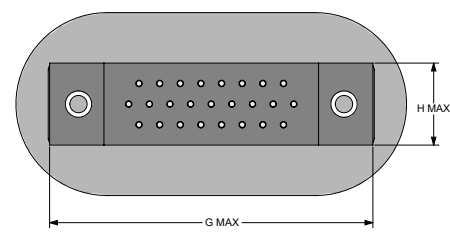
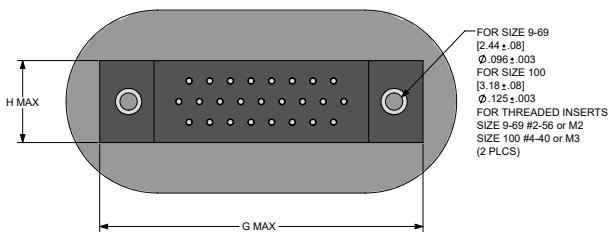
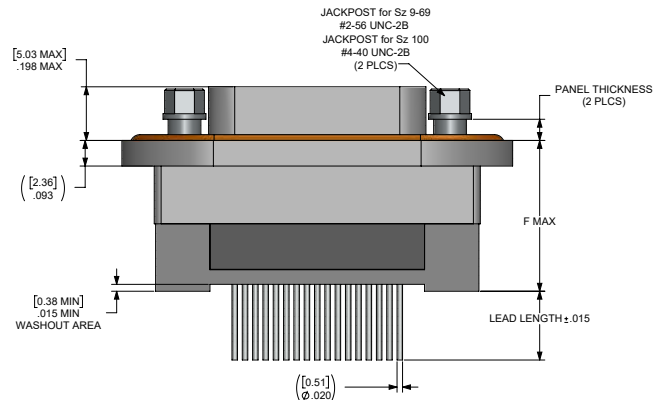
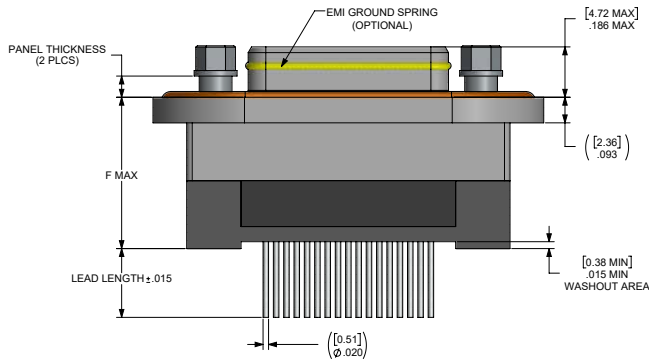
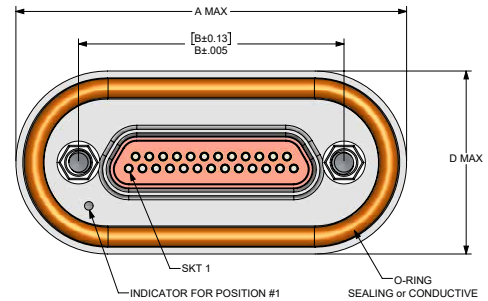
BOARD STRAIGHT CONNECTOR



**PLUG**



**RECEPTACLE**



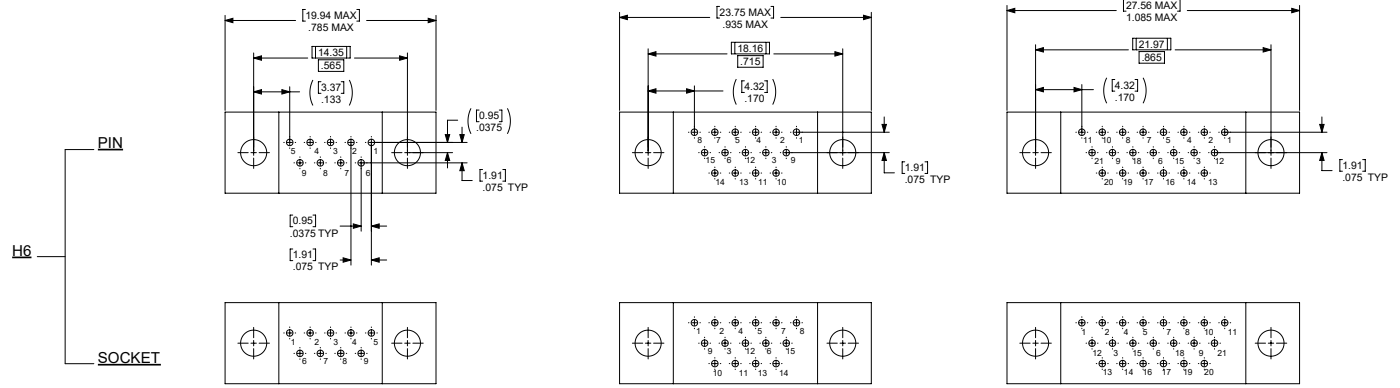
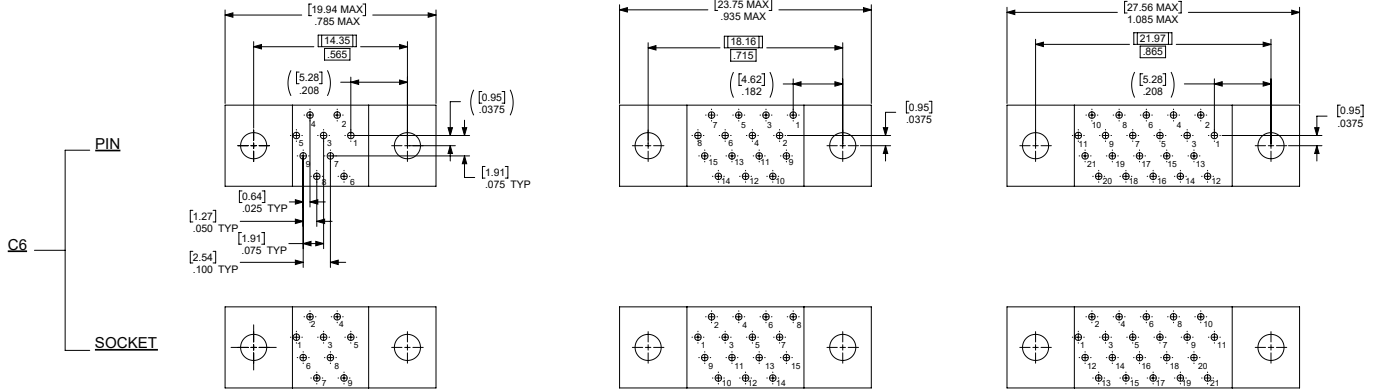
Dimensions are in inch(mm)

SIZE	A MAX	B ±.005 (0.13)	D MAX	F MAX	G MAX	H MAX
09	1.025 (26.04)	.565 (14.35)	.675 (17.14)	.570 (14.48)	.785 (19.94)	.310 (7.87)
15	1.225 (31.12)	.715 (18.16)			.935 (23.75)	
21	1.325 (33.66)	.865 (21.97)			1.085 (27.56)	
25	1.425 (36.20)	.965 (24.51)			1.185 (30.10)	
31	1.545 (39.24)	1.115 (28.32)			1.335 (33.91)	
37	1.725 (43.82)	1.265 (32.13)	.715 (18.16)	.630 (16.00)	1.485 (37.72)	.400 (10.16)
51	1.695 (43.05)	1.215 (30.86)			1.435 (36.45)	
69	1.995 (50.67)	1.515 (38.48)			1.735 (44.07)	
100	2.375 (60.33)	1.800 (45.72)	.765 (19.43)		2.170 (55.12)	.510 (12.95)

# MICRO-D PCB O-RING CONNECTORS SERIES 107

## C6 | H6 TERMINATION TYPE VERTICAL MOUNT REAR VIEW

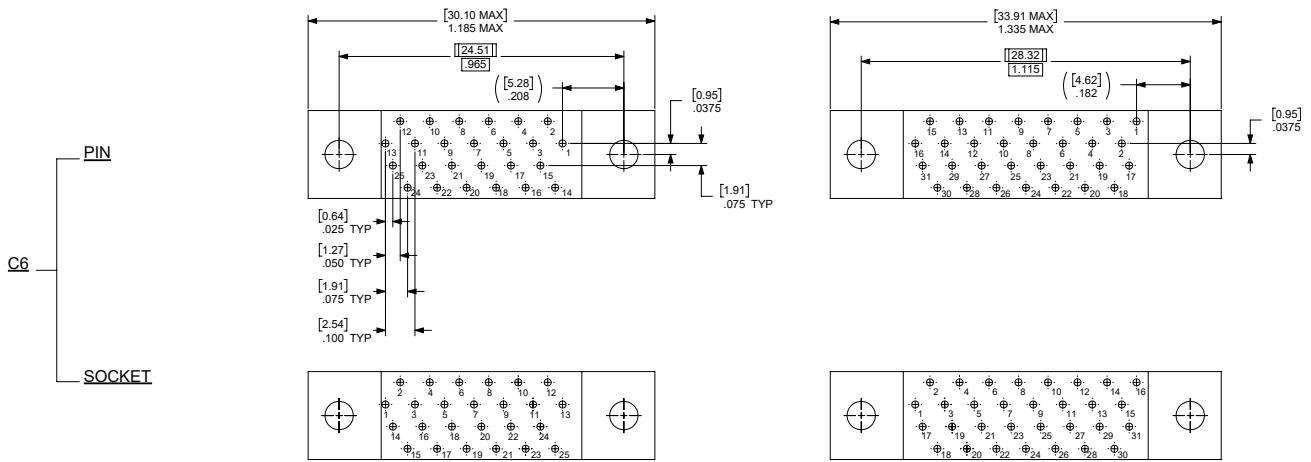
MICRO-D



**09 CONTACTS**

**15 CONTACTS**

**21 CONTACTS**

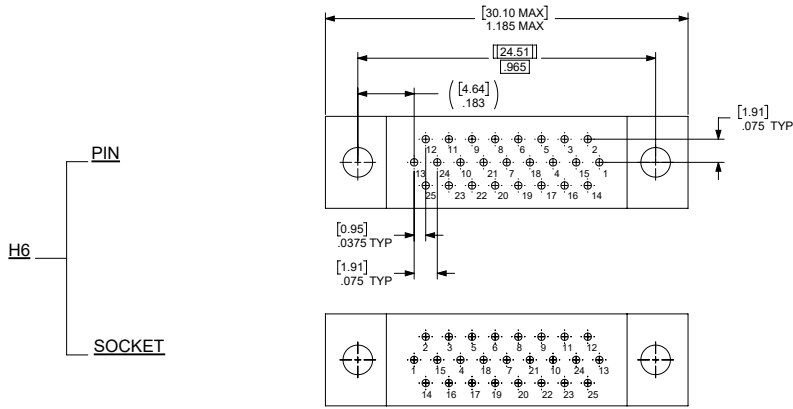


**25 CONTACTS**

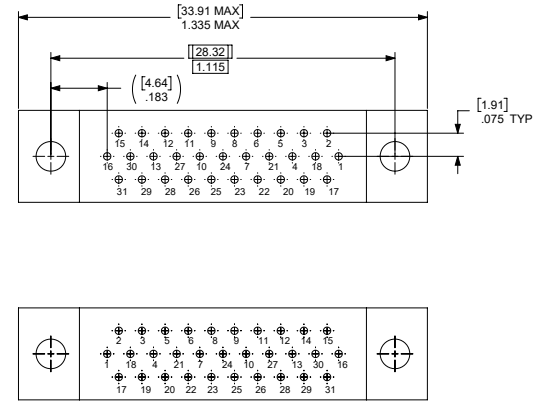
**31 CONTACTS**

Cavity identification numbers are for reference only and does not appear on the connector.

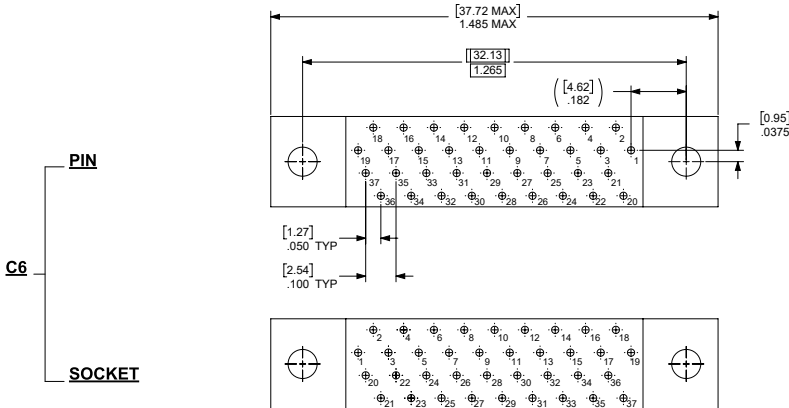
### C6 | H6 TERMINATION TYPE VERTICAL MOUNT REAR VIEW



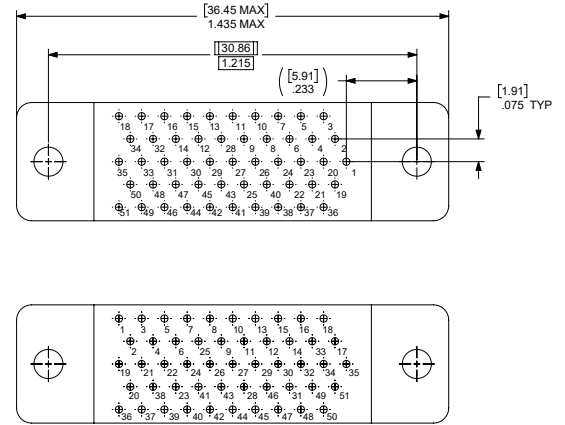
**25 CONTACTS**



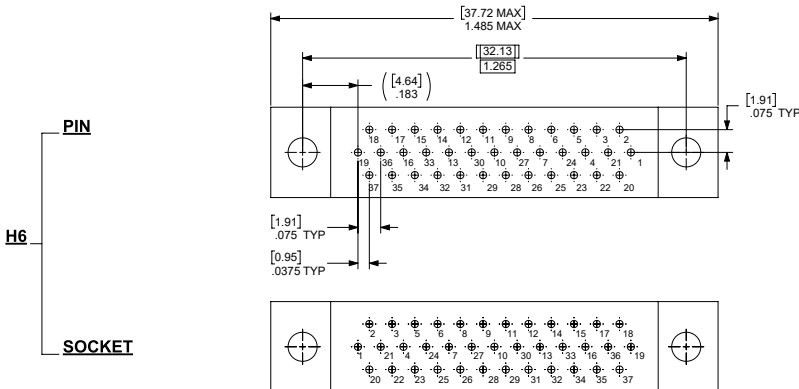
**31 CONTACTS**



**37 CONTACTS**



**51 CONTACTS**

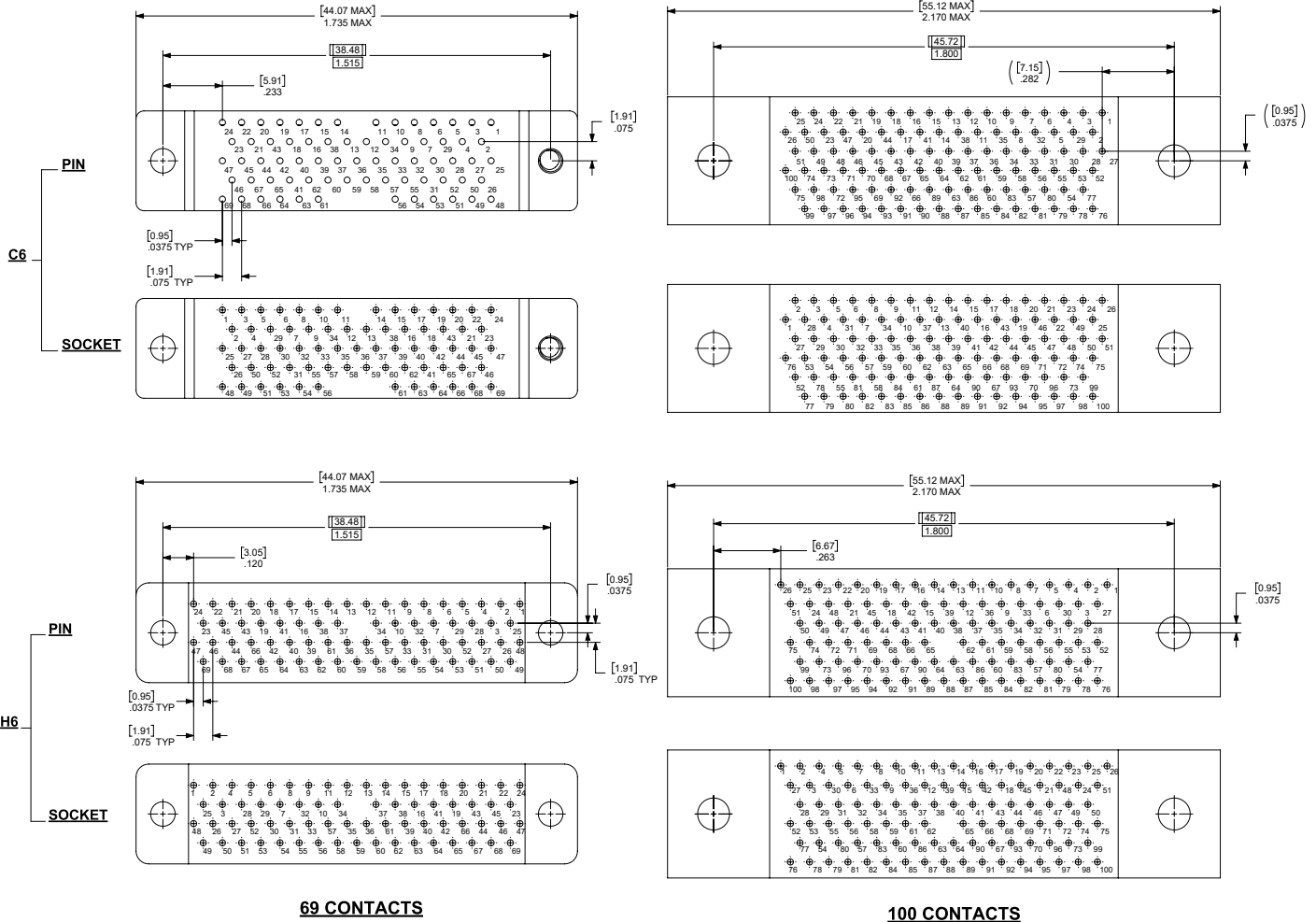


Cavity identification numbers are for reference only and does not appear on the connector.

# MICRO-D PCB O-RING CONNECTORS SERIES 107

## C6 | H6 TERMINATION TYPE VERTICAL MOUNT REAR VIEW

MICRO-D



**69 CONTACTS**

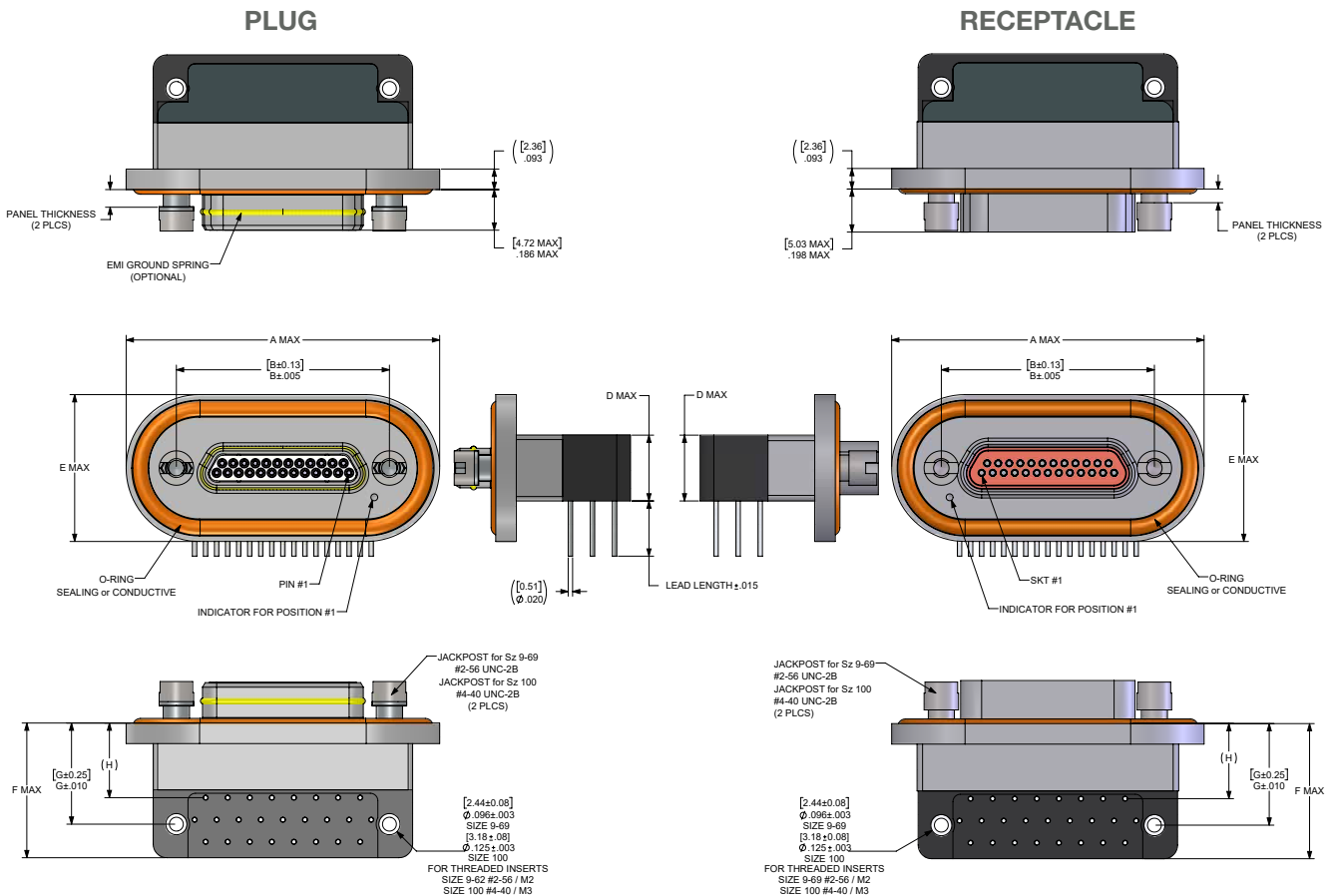
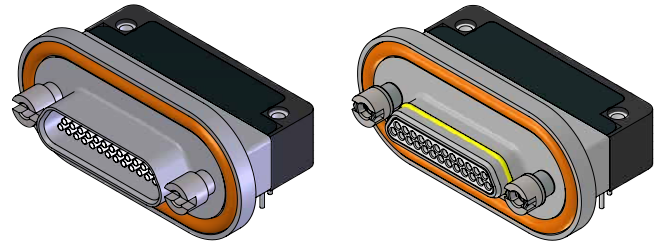
**100 CONTACTS**

Cavity identification numbers are for reference only and does not appear on the connector.



## CBR/HBR Termination

BOARD RIGHT ANGLE CONNECTOR



Dimensions are in inch(mm)

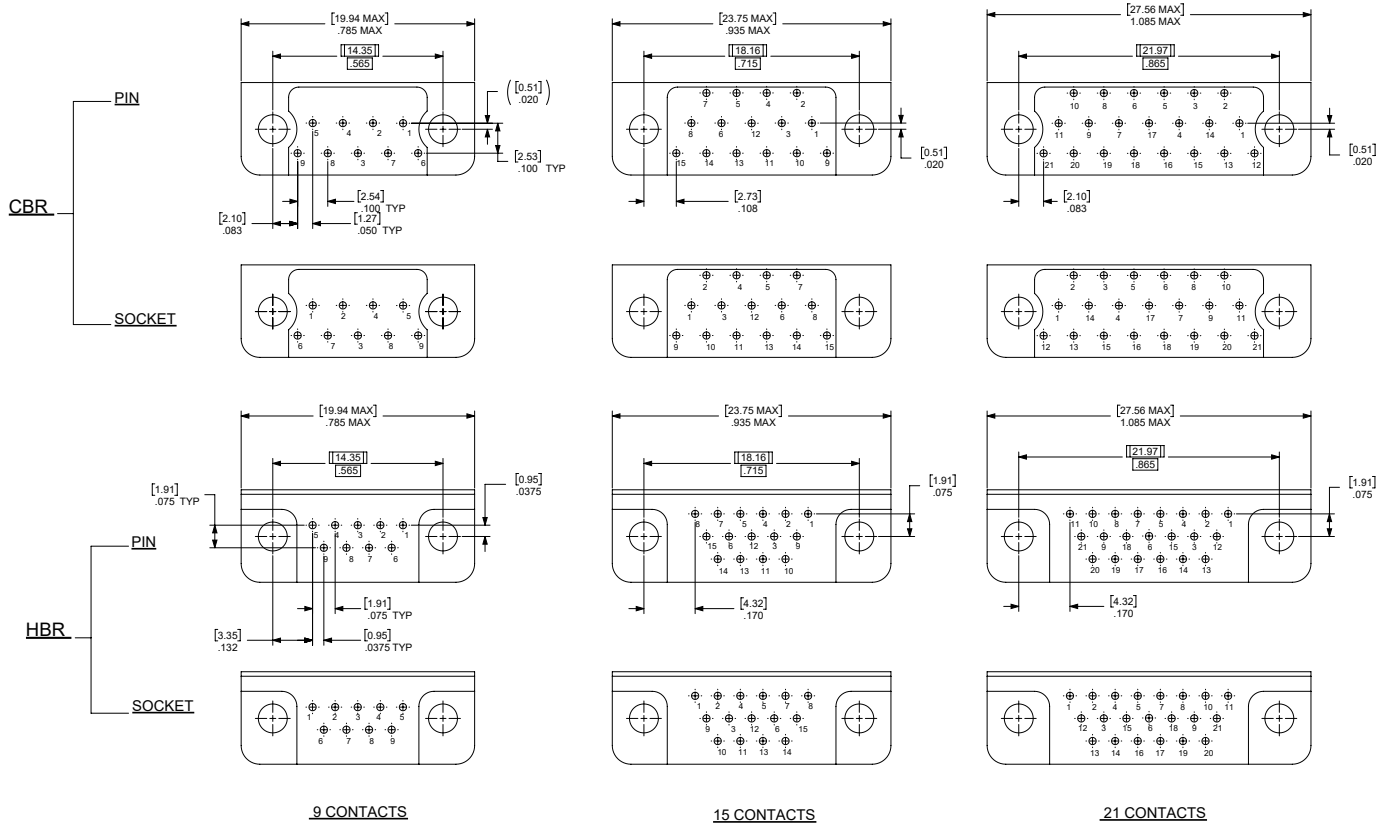
SIZE	A MAX	B ±.005 (0.13)	D MAX	E MAX	F MAX		G ±.010 (0.25)	H REF.	
					CBR	HBR		CBR	HBR
09	1.025 (26.04)	.565 (14.35)	.308 (7.82)	.675 (17.14)	.650 (16.51)	.650 (16.51)	.460 (11.68)	.440 (11.18)	.418 (10.62)
15	1.225 (31.12)	.715 (18.16)						.340 (8.64)	.380 (9.65)
21	1.325 (33.66)	.865 (21.97)			.750 (19.05)	.650 (16.51)		.360 (9.14)	.398 (10.11)
25	1.425 (36.20)	.965 (24.51)							
31	1.545 (39.24)	1.115 (28.32)	.355 (9.02)	.715 (18.16)	.900 (22.86)	.510 (12.95)	.410 (10.41)	.423 (10.74)	
37	1.725 (43.82)	1.265 (32.13)			1.000 (25.40)				
51	1.695 (43.05)	1.215 (30.86)			1.250 (31.75)				.900 (22.86)
69	1.995 (50.67)	1.515 (38.48)	.394 (10.01)	.765 (19.43)	.610 (15.49)	.610 (15.49)	.410 (10.41)	.423 (10.74)	
100	2.375 (60.33)	1.800 (45.72)							

# MICRO-D PCB O-RING CONNECTORS SERIES 107

## CBR | HBR TERMINATION TYPE RIGHT ANGLE (90 DEG) NARROW PROFILE PC CONFIGURATIONS

.100 (2.54) x .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)  
.075 (1.91) x .075 (1.91) GRID PATTERN, OFFSET .0375 (.95)

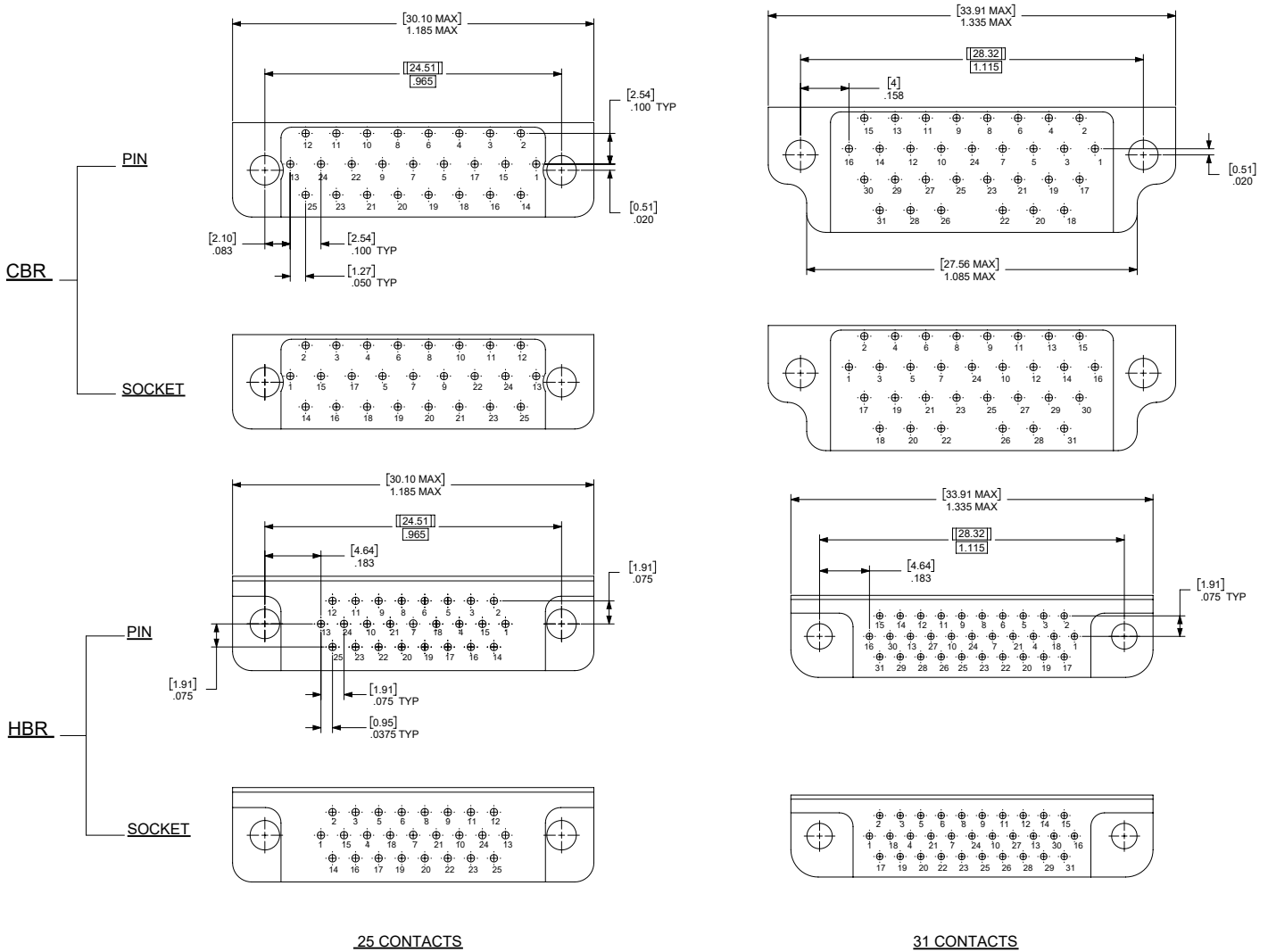
MICRO-D



Cavity identification numbers are for reference only and does not appear on the connector.

**CBR | HBR TERMINATION TYPE  
RIGHT ANGLE (90 DEG) NARROW PROFILE PC CONFIGURATIONS**

.100 (2.54) x .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)  
.075 (1.91) x .075 (1.91) GRID PATTERN, OFFSET .0375 (.95)



Cavity identification numbers are for reference only and does not appear on the connector.

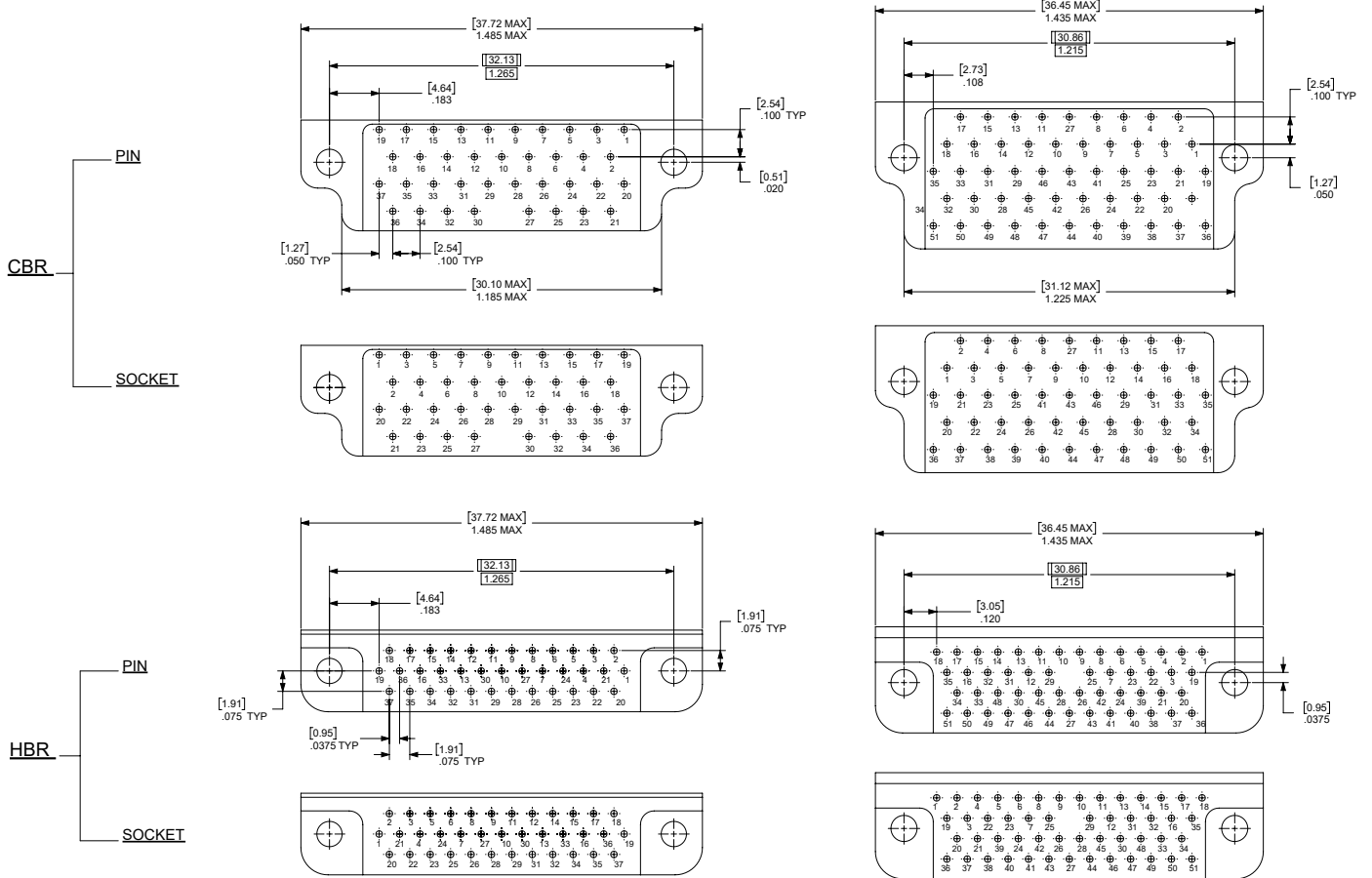
# MICRO-D PCB O-RING CONNECTORS

## SERIES 107

### CBR | HBR TERMINATION TYPE RIGHT ANGLE (90 DEG) NARROW PROFILE PC CONFIGURATIONS

.100 (2.54) x .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)  
.075 (1.91) x .075 (1.91) GRID PATTERN, OFFSET .0375 (.95)

MICRO-D



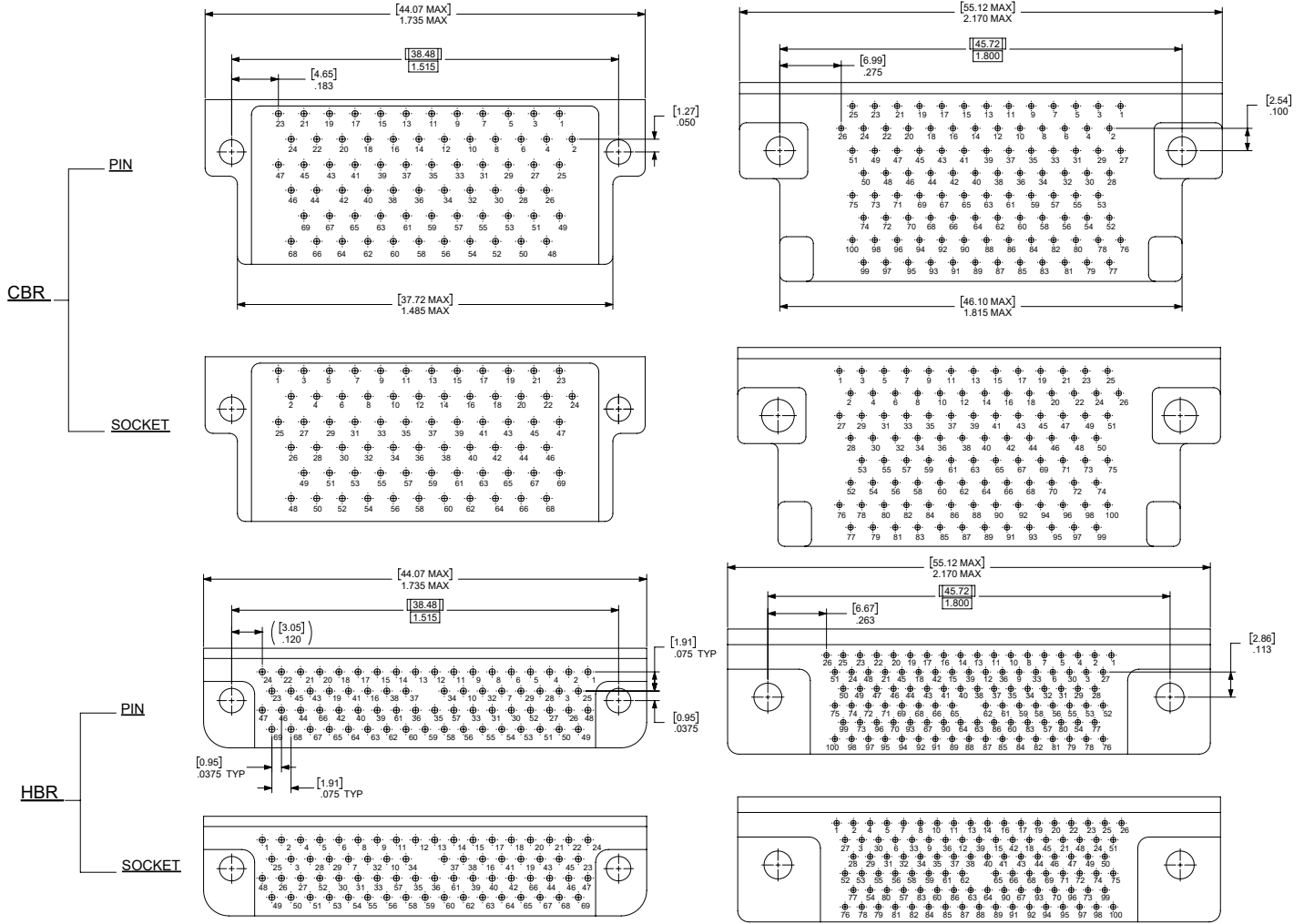
37 CONTACTS

51 CONTACTS

Cavity identification numbers are for reference only and does not appear on the connector.

**CBR | HBR TERMINATION TYPE  
RIGHT ANGLE (90 DEG) NARROW PROFILE PC CONFIGURATIONS**

.100 (2.54) x .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)  
.075 (1.91) x .075 (1.91) GRID PATTERN, OFFSET .0375 (.95)



69 CONTACTS

100 CONTACTS

Cavity identification numbers are for reference only and does not appear on the connector.

# MICRO-D O-RING PCB CONNECTORS

## SERIES 117

### How to Order

### FEATURES

- Polarization is reversed from series 107 CBR type connector.
- Solid copper 24 AWG PCB leads tin plated, and solder dipped.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
RoHS Compliance	Connector Series	Insulated Material	Shell Finish	Connector Size	Connector Type	Termination Type	Hardware (Pre-Installed)	Threaded Insert	Lead Length (inches)	Non Standard Length
	117	R	N	51	P-	CBR	PD	T	F-	125

#### 1. RoHS Compliance

<b>E</b>	RoHS Compliant
	Blank for Non-RoHS

#### 2. Connector Series

<b>117</b>	Reversed Shell O-Ring
------------	-----------------------

#### 3. Insulated Material

	Polyphenylene Sulfide (Ryton)
<b>R</b>	Sealing O-Ring
<b>C</b>	Conductive O-Ring
<b>H</b>	Sealed to 10 <sup>-5</sup> CC/ATM (Air)

#### 4. Shell Finish

<b>A</b>	Anodize (Black)
<b>B</b>	Zinc Nickel (Black Chromate)
<b>C</b>	Cadmium (Yellow Chromate)
<b>D</b>	Olive Drab Cadmium
<b>F</b>	Chem Film
<b>G</b>	Gold
<b>K</b>	Zinc Nickel- 48 hrs
<b>L</b>	Pure Electro-Deposited Aluminum
<b>N</b>	Electroless Nickel
<b>T</b>	Nickel Teflon

#### 5. Connector Size (Number of Contacts)

<b>09</b>
<b>15</b>
<b>21</b>
<b>25</b>
<b>31</b>
<b>37</b>
<b>51</b>
<b>69</b>
<b>100</b>

#### 6. Connector Type

<b>S-</b>	Receptacle (Socket)
<b>P-</b>	Plug (Pin)
<b>G-</b>	Plug (Pin) w/ EMI Ground Spring

#### 7. Termination Type

<b>CBR</b>	Narrow Right Angle
<b>HBR</b>	High Density CBR

#### 8. Hardware (Pre-Installed)

<b>H</b>	Threaded Insert (#2-56 for Size 9-69, #4-40 for Size 100)
<b>D</b>	Metric Threaded Mounting Hole M2 (Size 9-69), M3 (Size 100)
<b>PA</b>	Hex Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness
<b>PB</b>	Hex Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness
<b>PC</b>	Hex Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
<b>PD</b>	Hex Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
<b>PE</b>	Hex Head RPM for .075"-.085" [1.91mm -2.16mm] Panel Thickness
<b>PF</b>	Hex Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
<b>PG</b>	Hex Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness
<b>SA</b>	Slot Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness

#### 8. Hardware (Pre-Installed)

<b>SB</b>	Slot Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness
<b>SC</b>	Slot Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
<b>SD</b>	Slot Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
<b>SE</b>	Slot Head RPM for .075"-.085" [1.91mm - 2.16mm] Panel Thickness
<b>SF</b>	Slot Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
<b>SG</b>	Slot Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness

#### 9. Threaded Insert (Pre-Installed PCB Mounting Options)

	Omit for No threaded Insert
<b>T</b>	#2-56 Threaded Insert (Size 9-69)
<b>U</b>	#4-40 Threaded Insert (Size 100 Only)
<b>V</b>	M2 Threaded Insert (Size 9-69)
<b>Z</b>	M3 Threaded Insert (Size 100 Only)

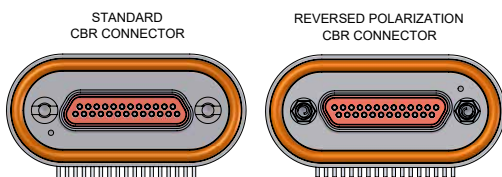
#### 10. Lead Length (inches)

<b>1-</b>	.109 ± .015
<b>2-</b>	.140 ± .015
<b>3-</b>	.172 ± .015
<b>4-</b>	.250 ± .015
<b>F-</b>	Non Standard Length
<b>GOLD</b>	
<b>5-</b>	.109 ± .015
<b>6-</b>	.140 ± .015
<b>7-</b>	.172 ± .015
<b>8-</b>	.250 ± .015
<b>G-</b>	Non Standard Length

#### 11. Non Standard Length

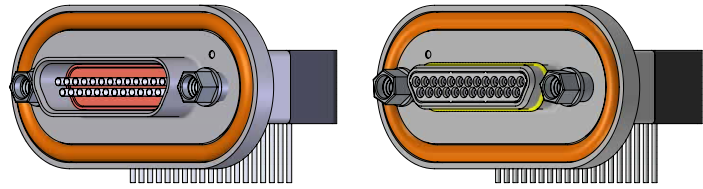
(0.109 < length < 1.00)  
e.g. 125 = .125 inches

MICRO-D



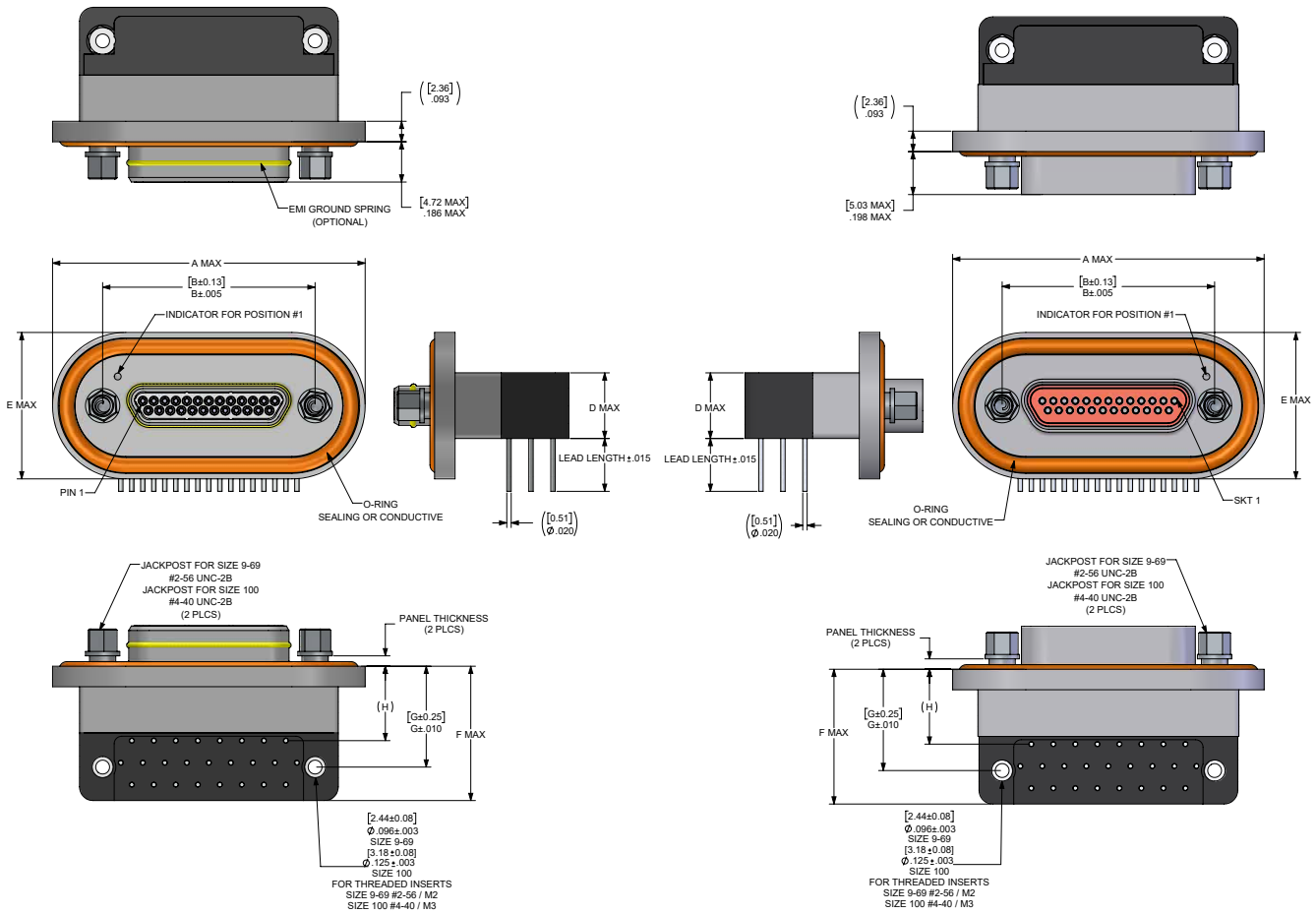
## CBR Termination

REVERSED POLARIZATION



### PLUG

### RECEPTACLE



Dimensions are in inch(mm)

SIZE	A MAX	B ±.005 (0.13)	D MAX	E MAX	F MAX		G ±.005 (0.13)	H ±.005 (0.13)		
					CBR	HBR		CBR	HBR	
09	1.025 (26.04)	.565 (14.35)	.308 (7.82)	.675 (17.14)	.650 (16.51)	.650 (16.51)	.460 (11.68)	.440 (11.18)	.418 (10.62)	
15	1.225 (31.12)	.715 (18.16)						.750 (19.05)	.340 (8.64)	.380 (9.65)
21	1.325 (33.66)	.865 (21.97)								
25	1.425 (36.20)	.965 (24.51)								
31	1.545 (39.24)	1.115 (28.32)	.355 (9.02)	.715 (18.16)	.900 (22.86)	.750 (19.05)	.510 (12.95)	.360 (9.14)	.398 (10.11)	
37	1.725 (43.82)	1.265 (32.13)			1.000 (25.40)					
51	1.695 (43.05)	1.215 (30.86)								
69	1.995 (50.67)	1.515 (38.48)	.394 (10.01)	.765 (19.43)	1.250 (31.75)	.900 (22.86)	.610 (15.49)	.410 (10.41)	.423 (10.74)	
100	2.375 (60.33)	1.800 (45.72)								



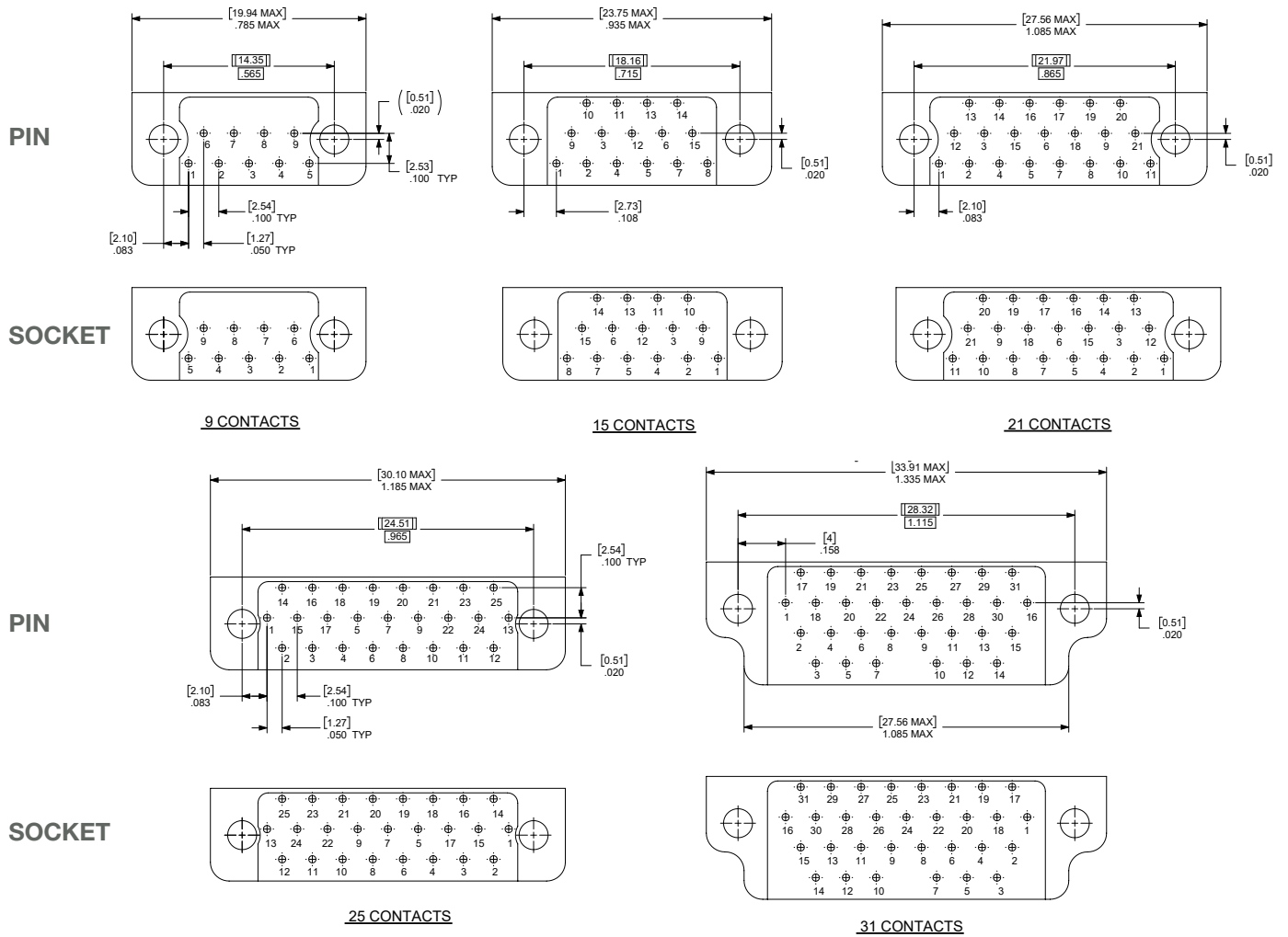
# MICRO-D PCB O-RING CONNECTORS

## SERIES 117

### RIGHT ANGLE (90 DEG) NARROW PROFILE PC CONFIGURATION

.100 (2.54) x .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)

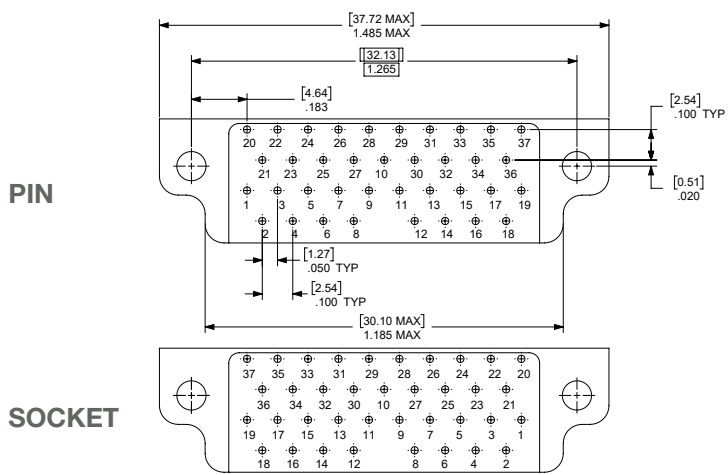
MICRO-D



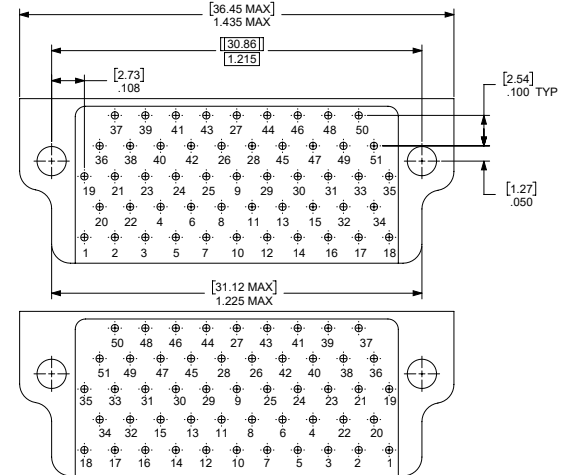
Cavity identification numbers are for reference only and does not appear on the connector.

### RIGHT ANGLE (90 DEG) NARROW PROFILE PC CONFIGURATION

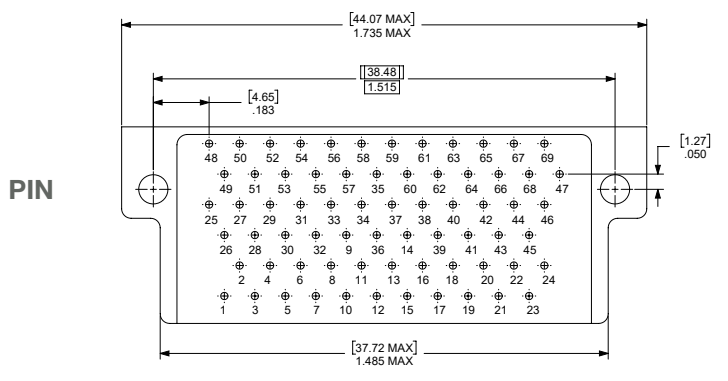
.100 (2.54) x .100 (2.54) GRID PATTERN, OFFSET .050 (1.27)



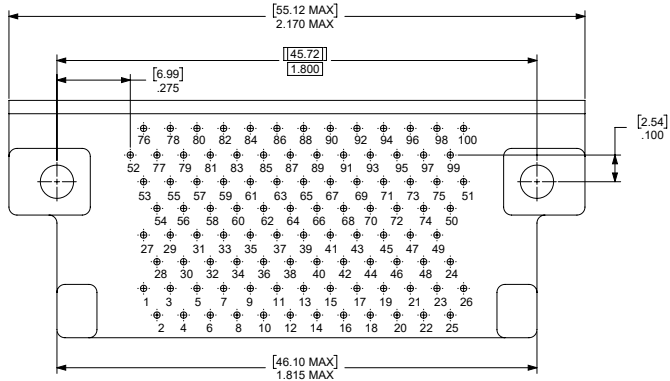
**37 CONTACTS**



**51 CONTACTS**



**69 CONTACTS**



**100 CONTACTS**

Cavity identification numbers are for reference only and does not appear on the connector.

# MICRO-D RIGHT ANGLE WIRES CONNECTORS

## SERIES 115 & 116

### How to Order

### FEATURES

- Space saving right angle exit on either the long or short row
- Metal shells to provide RFI/EMI shielding
- Supplied pre-wired and fully potted

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
RoHS Compliance	Connector Series	Insulated Sealing Type	Shell Finish	Connector Size	Connector Type	Wire Size (AWG)	Wire Type	Wire Color/Finish	Wire Length	Hardware (Pre-Installed)	Non Standard Length
	115	R	N	15	P-	3	E	6	F	M2-	125

#### 1. RoHS Compliance

<b>E</b>	RoHS Compliant
	Blank for Non-RoHS

#### 5. Connector Size (Number of Contacts)

<b>09</b>
<b>15</b>
<b>21</b>
<b>25</b>
<b>31</b>
<b>37</b>
<b>51</b>
<b>69</b>
<b>100</b>

#### 11. Hardware (Pre-Installed)

<b>B-</b>	Standard Mounting Holes
<b>T-</b>	Threaded Mounting Holes (#2-56 for Sz 9-39, #4-40 for Sz. 100)
<b>D-</b>	Metric Threaded Mounting Hole M2 (Size 9-69), M3 (Size 100)
<b>P-</b>	Jackpost
<b>M2-</b>	Low Profile Jackscrew, Allen Head
<b>M3-</b>	High Profile Jackscrew, Allen Head
<b>M5-</b>	Low Profile Jackscrew Allen Head
<b>M6-</b>	High Profile Jackscrew, Slot Head
<b>L-</b>	Captive Low Profile Jackscrew
<b>K-</b>	Captive High Profile Jackscrew
<b>F-</b>	Forward Float Mount
<b>R-</b>	Reverse Float Mount
<b>PA</b>	Hex Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness

#### 2. Connector Series

Metal Shell Per M83513 Right Angle Wire Series	
<b>115</b>	Exit to Short Row
<b>116</b>	Exit to Long Row

#### 6. Connector Type

<b>S-</b>	Receptacle (socket)
-----------	---------------------

#### 7. Wire Size (AWG)

<b>3</b>	28
<b>4</b>	26 (M835351 STD)
<b>5</b>	25 (Solid Wire Only)
<b>6</b>	24

#### 11. Hardware (Pre-Installed)

<b>PB</b>	Hex Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness
<b>PC</b>	Hex Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
<b>PD</b>	Hex Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
<b>PE</b>	Hex Head RPM for .075"-.085" [1.91mm -2.16mm] Panel Thickness
<b>PF</b>	Hex Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
<b>PG</b>	Hex Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness
<b>SA</b>	Slot Head Rear Panel Mount Jackpost for .027" - .037" [.68mm - .94mm] Panel Thickness

#### 3. Insulated Material

<b>R</b>	Polyphenylene Sulfide (Ryton)
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#### 8. Wire Type

**GENERAL APPLICATIONS:**

<b>A</b>	7 Strd. per NEMA-HP3 (MIL-W-16878/4)
<b>B</b>	7 Strd. per NEMA-HP3 (Formerly MIL-W-16878/6)
<b>C</b>	19 Strd. Per NEMA-HP3 (MIL-W-16878/4)
<b>D</b>	19 Strd. Per NEMA-HP3 (MIL-W-16878/6)

**MILITARY/AEROSPACE:**

<b>E</b>	Per MIL-W-22759/11 (M83513 Standard)
<b>F</b>	Per MIL-W-22759/33 (Space Grade)
<b>L</b>	Solid Wire Uninsulated
<b>G</b>	04035-26A

#### 11. Hardware (Pre-Installed)

<b>SB</b>	Slot Head RPM for .042" - .052" [1.06mm - 1.32mm] Panel Thickness
<b>SC</b>	Slot Head RPM for .057" - .067" [1.45mm - 1.70mm] Panel Thickness
<b>SD</b>	Slot Head RPM for .088" - .098" [2.24mm - 2.49mm] Panel Thickness
<b>SE</b>	Slot Head RPM for .075"-.085" [1.91mm - 2.16mm] Panel Thickness
<b>SF</b>	Slot Head RPM for .120"-.130" [3.05mm - 3.30mm] Panel Thickness
<b>SG</b>	Slot Head RPM for .067"-.077" [1.70mm - 1.96mm] Panel Thickness

#### 4. Shell Finish

<b>A</b>	Anodize (Black)
<b>B</b>	Zinc Nickel (Black Chromate)
<b>C</b>	Cadmium (Yellow Chromate)
<b>D</b>	Olive Drab Cadmium
<b>G</b>	Gold
<b>K</b>	Zinc Nickel- 48 hrs
<b>N</b>	Electroless Nickel
<b>T</b>	Nickel Teflon

#### 9. Wire Color/Finish

<b>1</b>	All White (M83513-STD)
<b>2</b>	All Yellow
<b>3</b>	Solid Wire Uninsulated, Tin Plated
<b>4</b>	Solid Wire Uninsulated, Gold plated
<b>5</b>	Color Coded Per MIL-STD-68) System I
<b>6</b>	1st 10 Color Black thru White Related (M83513 Standard) *off shelf

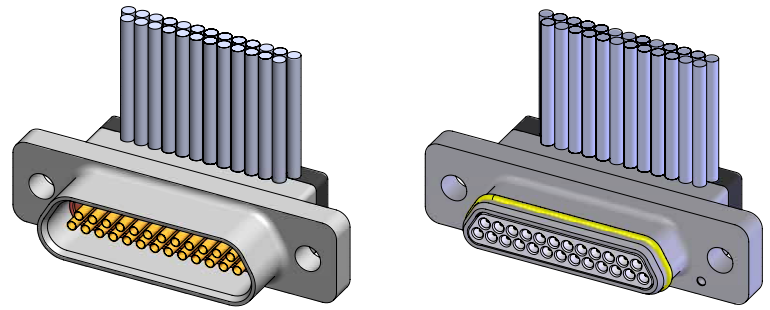
#### 10. Wire Length (inches)

<b>A</b>	18.00 (+1.00/-0.00)
<b>B</b>	36.00 (+1.00/-0.00)
<b>C</b>	72.00 (+1.00/-0.00)
<b>D</b>	0.50 (Solid wire only +0.20/-0.00)
<b>E</b>	1.00 (Solid wire only +0.20/-0.00)
<b>F</b>	Non-Standard Length

#### 12. Non Standard Length

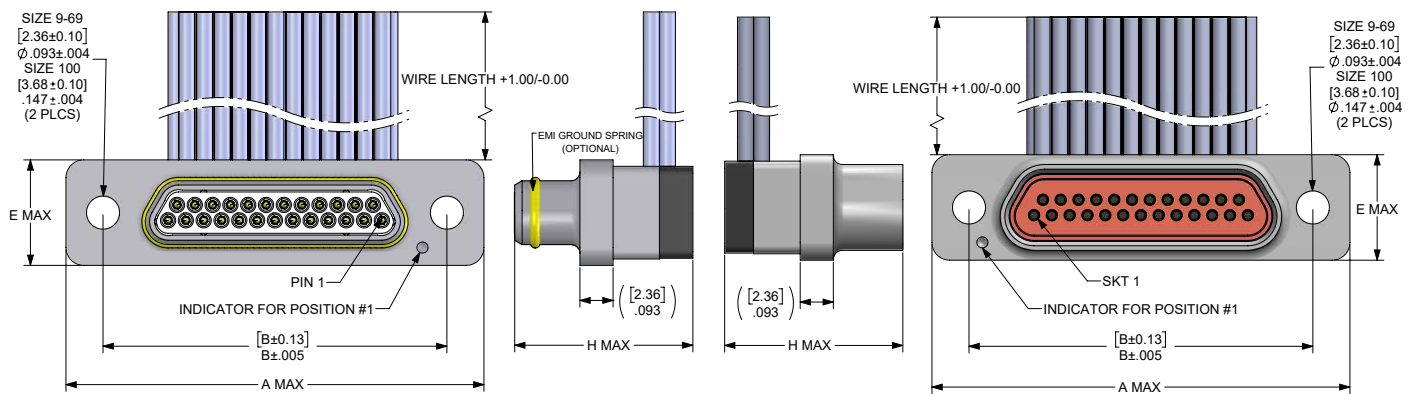
Stranded Wire Ex: 1 = 1.00", 100 = 100.00"  
Solid Wire (.109" < Length < 1.00") EX: 110 = .110"

MICRO-D



### PLUG

### RECEPTACLE



Dimensions are in inch(mm)

SIZE	A MAX	B ± 0.005	E MAX	H MAX
09	.785 (19.94)	.565 (14.35)	.308 (7.82)	.500 (12.7)
15	.935 (23.75)	.715 (18.16)		
21	1.085 (27.56)	.865 (21.97)		
25	1.185 (30.10)	.965 (24.51)		
31	1.335 (33.91)	1.115 (28.32)		
37	1.485 (37.72)	1.265 (32.13)	.351 (8.92)	.530 (13.46)
51	1.435 (36.45)	1.215 (30.86)		
69	1.735 (44.07)	1.515 (38.48)		
100	2.170 (55.12)	1.800 (45.72)		

# MICRO-D INTEGRATED BACKSHELL CONNECTORS

## SERIES 119

### How to Order

#### FEATURES

- Fully intermateable with existing M83513 connectors
- 1-Piece construction
- Lower cost than traditional Micro-D + backshell
- Available in all standard wire options
- Identical electrical performance of conventional M83513 design

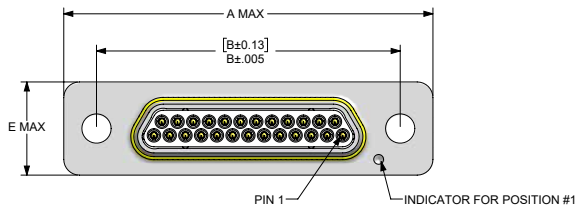
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
RoHS Compliance	Connector Series	Insulated Material	Shell Finish	Connector Size	Connector Type	Wire Size (AWG)	Wire Type	Wire Color/Finish	Wire Length	Hardware (Pre-Installed)	Non Standard Length
	119	R	N	21	S-	6	A	4	F	P-	10

MICRO-D

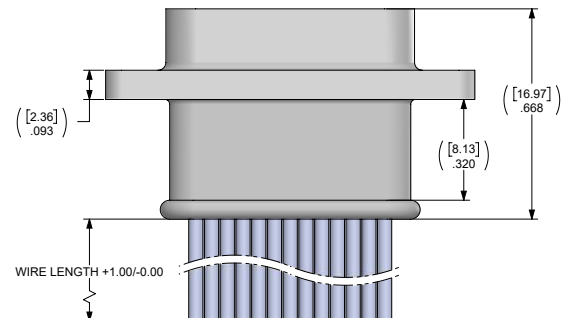
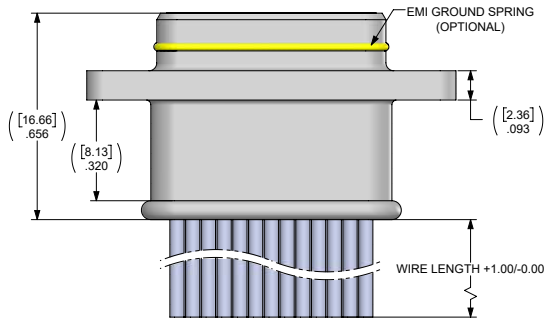
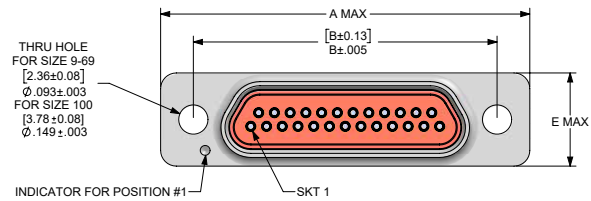
<b>1. RoHS Compliance</b> <b>E</b> RoHS Compliant Blank for Non-RoHS	<b>2. Connector Series</b> <b>119</b> Integrated Backshell Series	<b>3. Insulated Sealing Type</b> <b>R</b> Polyphenylene Sulfide (Ryton)	<b>4. Shell Finish</b> <b>A</b> Anodize (Black) <b>C</b> Cadmium (Black Chromate) <b>G</b> Gold <b>K</b> Zinc Nickel- 48 hrs <b>N</b> Electroless Nickel <b>T</b> Nickel Teflon
<b>5. Connector Size (Number of Contacts)</b> <b>09</b> <b>15</b> <b>21</b> <b>25</b> <b>31</b> <b>37</b> <b>51</b> <b>69</b> <b>100</b>	<b>6. Connector Type</b> <b>S-</b> Receptacle (Socket) <b>P-</b> Plug (Pin) <b>G-</b> Plug (Pin) w/ EMI Ground Spring	<b>7. Wire Size (AWG)</b> <b>4</b> 26 (M835351 STD) <b>5</b> 25 (Solid Wire Only) <b>6</b> 24	
<b>8. Wire Type</b> <b>GENERAL APPLICATIONS:</b> <b>A</b> 7 Strd. per NEMA-HP3 (MIL-W-16878/4) <b>B</b> 7 Strd. per NEMA-HP3 (Formerly MIL-W-16878/6) <b>C</b> 19 Strd. Per NEMA-HP3 (MIL-W-16878/4) <b>D</b> 19 Strd. Per NEMA-HP3 (MIL-W-16878/6) <b>MILITARY/AEROSPACE:</b> <b>E</b> Per MIL-W-22759/11 (M83513 Standard) <b>F</b> Per MIL-W-22759/33 (Space Grade) <b>L</b> Solid Wire Uninsulated <b>G</b> 04035-26A	<b>9. Wire Color/Finish</b> <b>1</b> All White (M83513-STD) <b>2</b> All Yellow <b>3</b> Solid Wire Uninsulated, Tin Plated <b>4</b> Solid Wire Uninsulated, Gold plated <b>5</b> Color Coded Per MIL-STD-68 System 1 <b>6</b> 1st 10 Color Black thru White Related (M83513 Standard)* off shelf	<b>10. Wire Length (Inches)</b> <b>A</b> 18.00 (+1.00/-0.00) <b>B</b> 36.00 (+1.00/-0.00) <b>C</b> 72.00 (+1.00/-0.00) <b>D</b> .500 (Solid wire only +0.20/-0.00) <b>E</b> 1.00 (Solid wire only +0.20/-0.00) <b>F</b> Non-Standard Length	<b>11. Hardware (Pre-Installed)</b> <b>B-</b> Standard Mounting Holes <b>P-</b> Jackpost <b>M2-</b> Hex Head Jackscrew <b>M5-</b> Slot Head Jackscrew <b>12. Non Standard Length</b> Stranded Wire Ex: 1 = 1.00", 100 = 100.00" Solid Wire (.109" < Length < 1.00") EX: 110 = .110"



## PLUG



## RECEPTACLE



Dimensions are in inch(mm)

SIZE	A MAX	B ± 0.005	E MAX
09	.785 (19.94)	.565 (14.35)	.308 (7.82)
15	.935 (23.75)	.715 (18.16)	
21	1.085 (27.56)	.865 (21.97)	
25	1.185 (30.10)	.965 (24.51)	
31	1.335 (33.91)	1.115 (28.32)	
37	1.485 (37.72)	1.265 (32.13)	.351 (8.92)
51	1.435 (36.45)	1.215 (30.86)	
69	1.735 (44.07)	1.515 (38.48)	
100	2.170 (55.12)	1.800 (45.72)	

# MICRO-D STRIP CONNECTORS

## SERIES 105

### How to Order

#### FEATURES

- One piece Ryton insulator
- Copper alloy, gold plated contacts (1-30 positions)
- 300 series stainless steel guide pin (optional, one or both ends)
- Coupling feature: Friction
- .050" (1.27) pitch contact spacing

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Connector Series	Insulated Material	Number of Contacts	Connector Type	Wire Size	Wire Type	Wire Color/ Finish	Wire Length	Ground Pin	Non Standard Length
105	R	09	P-	3	A	1	A	2-	20

MICRO-D

1. Connector Series	
<b>105</b>	Strip Connector

2. Insulated Material	
<b>R</b>	Polyphenylene Sulfide (Ryton)

3. Number of Contacts	
<b>1 to 30</b>	No Guide Pins
<b>1 to 29</b>	Guide Pin on One End
<b>1 to 28</b>	Guide Pin on Both Ends

4. Connector Type	
<b>P-</b>	Plug (Pins)
<b>S-</b>	Receptacle (Socket)

5. Wire Size	
	Omit for Solder Cup
<b>1</b>	32
<b>2</b>	30
<b>3</b>	28
<b>4</b>	26 (Stranded)
<b>5</b>	25 (Solid Uninsulated)
<b>6</b>	24

6. Wire Type	
	Omit for Solder Cup
NAVAL APPLICATIONS:	
<b>A</b>	7 Strd. per NEMA-HP3 (MIL-W-16878/4)
<b>B</b>	7 Strd. per NEMA-HP3 (Formerly MIL-W-16878/6)
<b>C</b>	19 Strd. Per NEMA-HP3 (MIL-W-16878/4)
<b>D</b>	19 Strd. Per NEMA-HP3 (MIL-W-16878/6)
MILITARY/AEROSPACE:	
<b>E</b>	Per MIL-W-22759/11 (M83513 Standard)
<b>F</b>	Per MIL-W-22759/33 (Space Grade)
<b>L</b>	Solid Wire Uninsulated

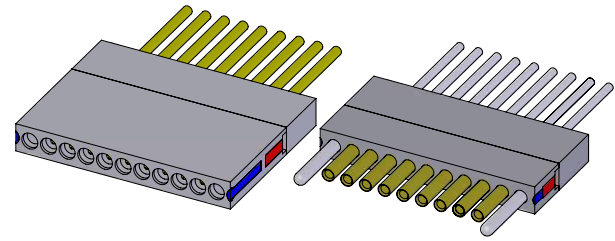
7. Wire Color / Finish	
	Omit for Solder Cup
<b>1</b>	All White (M83513 Standard) *Off Shelf
<b>2</b>	All Yellow
<b>3</b>	Solid Wire Uninsulated, Tin Plated
<b>4</b>	Solid Wire Uninsulated, Gold Plated
<b>5</b>	Color coded per Mil-Standard-681, System 1
<b>6</b>	1st 10 Colors black thru white, repeated (M83513 Standard) *Off shelf

8. Wire Length (Inches)	
	Omit for Solder Cup
<b>A</b>	.18.00 (+1.00/ -0.00)
<b>B</b>	.36.00 (+1.00/ -0.00)
<b>C</b>	.72.00 (+1.00/ -0.00)
<b>D</b>	0.500 (+0.20/-0.00 Solid Wire Only)
<b>E</b>	1.00 (+0.20/-0.00 Solid Wire Only)
<b>F</b>	Non-Standard Length

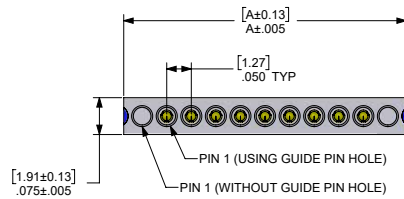
9. Guide Pin	
	Guide Pin for Receptacle Guide, Pin Hole For Plug
	Omit for no guide pin
<b>1-</b>	One End
<b>2-</b>	Both End

10. Non Standard Length (Inches)	
	Stranded Wire (No Decimal Values) e.g. 1=1 inch, 100=100 inches
	Solid Wire (0.109 < length < 1.00) e.g. 110 = .110 inches, 999=.999 inches

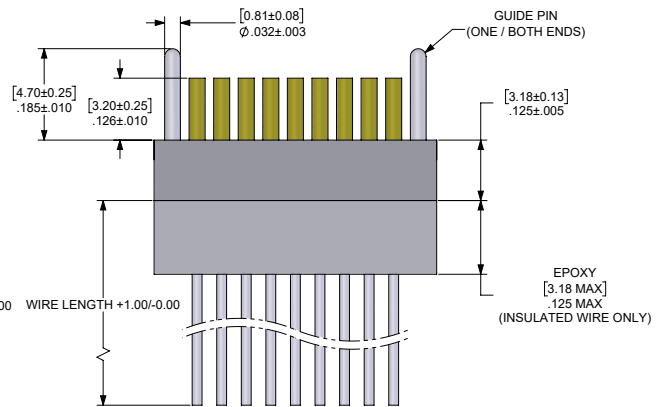
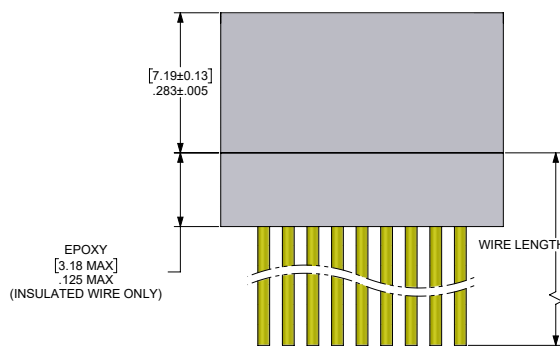
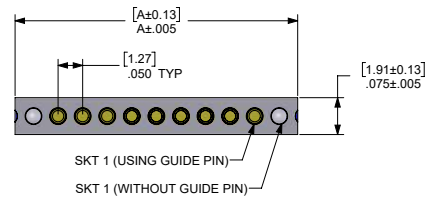




### PLUG



### RECEPTACLE



Dimensions are in inch(mm)

SIZE	A ±.005 (0.13)
01	.075 (1.91)
02	.125 (3.18)
03	.175 (4.45)
04	.225 (5.72)
05	.275 (6.99)
06	.325 (8.26)
07	.375 (9.53)
08	.425 (10.80)
09	.475 (12.07)
10	.525 (13.34)
11	.575 (14.61)
12	.625 (15.88)
13	.675 (17.15)
14	.725 (18.42)
15	.775 (19.69)

SIZE	A ±.005 (0.13)
16	.825 (20.96)
17	.875 (22.23)
18	.925 (23.50)
19	.975 (24.77)
20	1.025 (26.04)
21	1.075 (27.31)
22	1.125 (28.58)
23	1.175 (29.85)
24	1.225 (31.12)
25	1.275 (32.39)
26	1.325 (33.66)
27	1.375 (34.93)
28	1.425 (36.20)
29	1.475 (37.47)
30	1.525 (38.74)

# MICRO-D HI-DENSITY CARD CONNECTORS

## SERIES 106

### How to Order

### FEATURES

- Designed for a space conscious industry.
- Provides an extremely dense and reliable interconnection for card-to-card and card-to-cable applications.
- Connector performance per M83513 specifications.
- Available in vertical mount for thru-hole applications and wire harness termination styles for both plug and receptacle.
- Wide selection of wire sizes (24 thru 30).
- Shell employs a polarizing “D” shape for correct mating.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
RoHS Compliance	Connector Series	Insulated Material	Shell Finish	Connector Size	Connector Type	Termination Type	Wire Type	Wire Color/Finish	Wire Length
	106	R	N	120	P-	4	A	1-	120

MICRO-D

#### 1. RoHS Compliance

<b>E</b>	RoHS Compliant
	Blank for Non-RoHS

#### 2. Connector Series

<b>106</b>	Hi-Density Card Connector
------------	---------------------------

#### 3. Insulator Material

<b>R</b>	Polyphenylene Sulfide (Ryton)
----------	-------------------------------

#### 4. Shell Finish

<b>A</b>	Anodize (Black)
<b>C</b>	Cadmium (Black Chromate)
<b>G</b>	Gold
<b>I</b>	Iridite/alodine
<b>N</b>	Electroless Nickel
<b>T</b>	Nickel Teflon

#### 5. Connector Size (Number of Contacts)

<b>50</b>	<b>104</b>
<b>54</b>	<b>112</b>
<b>58</b>	<b>120</b>
<b>62</b>	<b>128</b>
<b>66</b>	<b>136</b>
<b>70</b>	<b>144</b>
<b>74</b>	<b>152</b>

#### 6. Connector Type

<b>P-</b>	Plug (Pin)
<b>S-</b>	Receptacle (Socket)

#### 7. Termination Type

WIRE HARNESS (WIRE SIZE AWG)	
<b>2</b>	30
<b>3</b>	28
<b>4</b>	26 (M83513 Standard) *off shelf
<b>6</b>	24
VERTICAL PCB MOUNT	
<b>BS</b>	Straight PCB Termination

#### 8. Wire Type

**GENERAL APPLICATIONS:**

<b>A</b>	7 Strd. per NEMA-HP3 (MIL-W-16878/4)
<b>B</b>	7 Strd. per NEMA-HP3 (Formerly MIL-W-16878/6)
<b>C</b>	19 Strd. Per NEMA-HP3 (MIL-W-16878/4)
<b>D</b>	19 Strd. Per NEMA-HP3 (MIL-W-16878/6)

#### 9. Wire Color / Finish

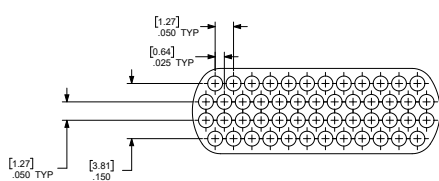
<b>1-</b>	All White (M83513 Standard) *Off Shelf
<b>2-</b>	All Yellow
<b>6-</b>	1st 10 Colors black thru white, repeated (M83513 Standard) Off shelf

#### 10. Wire Length

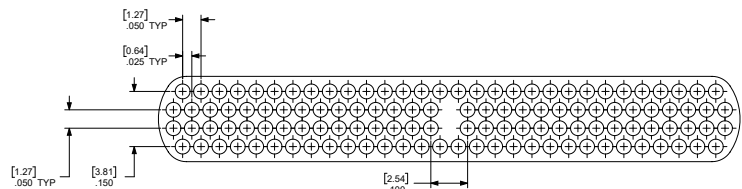
(Inches +1.00/-0.00)  
e.g. 1 = .1 inches, -100= 100 inches

**Note: Omit all wire specifications for PCB termination**

### CONTACT ARRANGEMENT



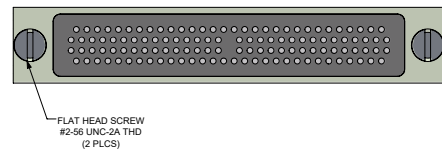
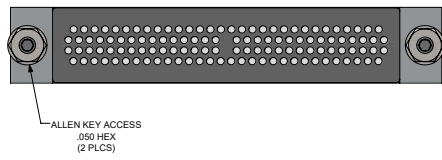
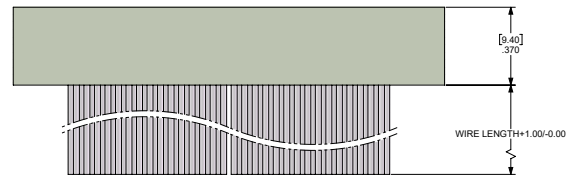
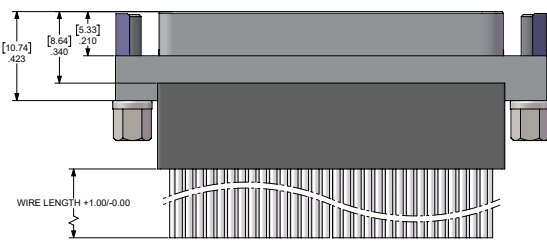
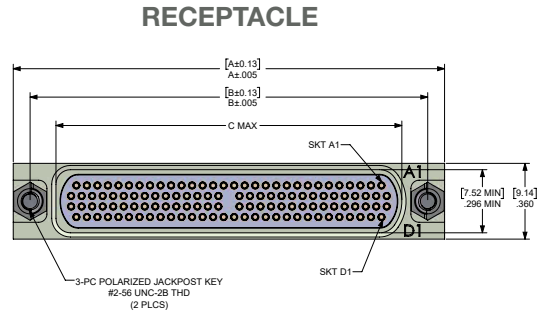
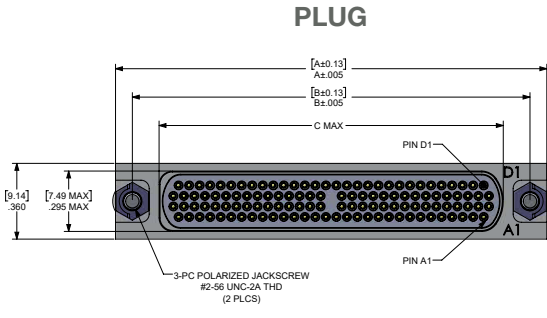
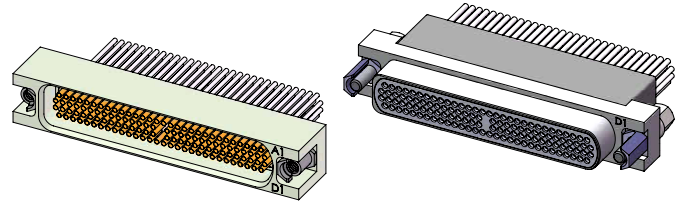
SIZE 50-74



SIZE 104-152

### Wire Harness

STRANDED WIRE TERMINATION



Dimensions are in inch(mm)

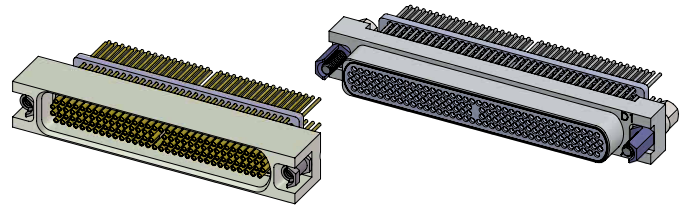
SIZE	A $\pm 0.005$ (0.13)	B $\pm 0.005$ (0.13)	C MAX	
			PLUG	RCPT
50	1.150 (29.21)	.990 (24.15)	.741 (18.82)	.747 (18.97)
54	1.200 (30.48)	1.04 (26.42)	.791 (20.09)	.797 (20.24)
58	1.250 (31.75)	1.090 (27.69)	.841 (21.36)	.847 (21.51)
62	1.300 (33.02)	1.140 (28.96)	.891 (22.63)	.897 (22.78)
66	1.350 (34.29)	1.190 (30.23)	.941 (23.90)	.947 (24.05)
70	1.400 (35.56)	1.240 (31.50)	.991 (25.17)	.997 (25.32)
74	1.450 (36.83)	1.290 (32.77)	1.041 (26.44)	1.047 (26.59)
104	1.850 (46.99)	1.690 (42.93)	1.441 (36.60)	1.447 (36.75)
112	1.950 (49.53)	1.790 (45.47)	1.541 (39.14)	1.547 (39.29)
120	2.050 (52.07)	1.890 (48.01)	1.641 (41.68)	1.647 (41.83)
128	2.150 (54.61)	1.990 (50.55)	1.741 (44.22)	1.747 (44.37)
136	2.250 (57.15)	2.090 (53.09)	1.841 (46.76)	1.847 (46.91)
144	2.350 (59.69)	2.190 (55.63)	1.941 (49.30)	1.947 (49.45)
152	2.450 (62.23)	2.290 (58.17)	2.041 (51.84)	2.047 (51.99)

# MICRO-D HI-DENSITY CARD CONNECTORS

## SERIES 106

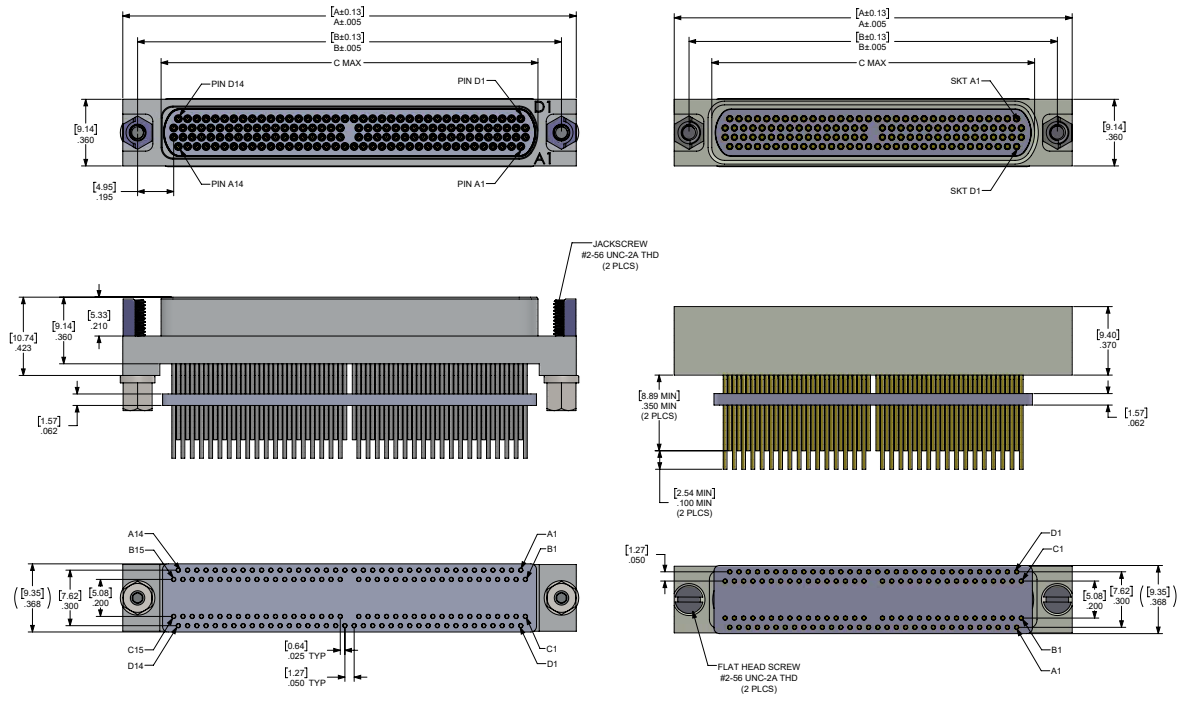
### Vertical PCB Mount

24 AWG WIRE, TIN DIPPED



PLUG

RECEPTACLE



Dimensions are in inch(mm)

SIZE	A ±.005 (0.13)	B ±.005 (0.13)	C MAX	
			PLUG	RCPT
50	1.150 (29.21)	.990 (24.15)	.741 (18.82)	.747 (18.97)
54	1.200 (30.48)	1.04 (26.42)	.791 (20.09)	.797 (20.24)
58	1.250 (31.75)	1.090 (27.69)	.841 (21.36)	.847 (21.51)
62	1.300 (33.02)	1.140 (28.96)	.891 (22.63)	.897 (22.78)
66	1.350 (34.29)	1.190 (30.23)	.941 (23.90)	.947 (24.05)
70	1.400 (35.56)	1.240 (31.50)	.991 (25.17)	.997 (25.32)
74	1.450 (36.83)	1.290 (32.77)	1.041 (26.44)	1.047 (26.59)
104	1.850 (46.99)	1.690 (42.93)	1.441 (36.60)	1.447 (36.75)
112	1.950 (49.53)	1.790 (45.47)	1.541 (39.14)	1.547 (39.29)
120	2.050 (52.07)	1.890 (48.01)	1.641 (41.68)	1.647 (41.83)
128	2.150 (54.61)	1.990 (50.55)	1.741 (44.22)	1.747 (44.37)
136	2.250 (57.15)	2.090 (53.09)	1.841 (46.76)	1.847 (46.91)
144	2.350 (59.69)	2.190 (55.63)	1.941 (49.30)	1.947 (49.45)
152	2.450 (62.23)	2.290 (58.17)	2.041 (51.84)	2.047 (51.99)

MICRO-D

# MICRO-D SOLDER-LESS SURFACE MOUNT SERIES SSMM **Amphenol**CANADA

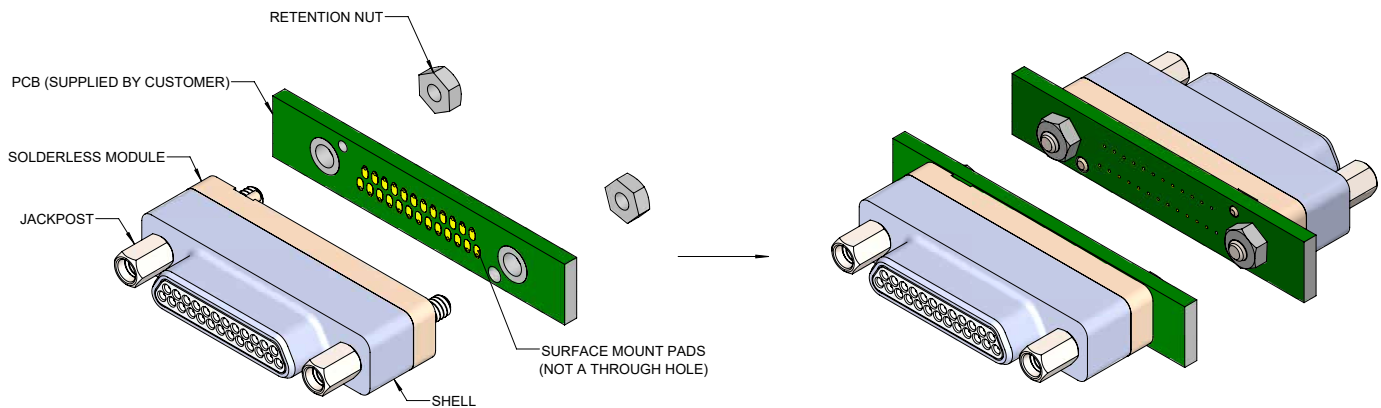
The solderless surface mount Micro-D (SSMM) is a new Micro PCB connector using Amphenol surface mount clip Technology and is fully intermateable with standard M83513 connectors. Connection to the board is made by spring loaded contacts which required contact pads instead of a traditional through holes, thus reducing the footprint of the connector. When PCB design space is critical, the smaller footprint allows more space for other board level components or smaller board. The solder-less surface mount Micro-D (SSMM) also eliminates the need for washing and soldering processes saving time and cost in PCB assembly.



## HANDLING

As these connectors have delicate contacts:

- Handle connector by the outer edges being careful to avoid touching the spring contacts.
- Do not touch spring contacts with fingers, tools, wipes, or any other devices.
- Latex gloves or finger cots must be used when handling and installing connectors. Do not use cotton gloves when handling the connectors.
- Return connectors to their original containers, if removed for incoming inspection purposes.
- Do not expose connectors to liquid or dry chemicals
- For long-term storage: store connectors in a clean, dry environment at a temperature between 40°-80°F (4°-26.67° C), and 30%-60% relative humidity.



**TABLE 1: SPECIFICATIONS**

LLCR	60, 63, 67 mΩ Max Depending on wire size
D.W.V	500 VAC / No DWV required after humidity
I.R	1000 MΩ
Current Rating	0.5A
Shock	50 G Half-Sine
Vibration	Frequency Ranges: 50 to 2000 Hz Peak Level: 10gn for 45 minutes in each axis
Thermal Shock	-55°C TO +80°C
Humidity	2000 hours total 25°C to 80°C at 80% RH TO 47% RH respectively for 2 hours at each temperature
Salt Spray	N/A
Magnetic Permeability	N/A

# MICRO-D SOLDER-LESS SURFACE MOUNT SERIES SSMM

## How to Order

### FEATURES

- Space savings
- Cost-optimized
- High-Quality
- Increased in contact density
- Increased space on opposite side of PCB for more components

1.	2.	3.	4.	5.	6.	7.	8.
Connector Series	Insulator Material	Shell Finish	Connector Size	Contact Type	Type	Hardware	Jackpost Length
100	R	N	25	P-	CS	P	490

1. Connector Series		2. Insulator Material		3. Shell Finish		4. Connector Size (Number of Contacts)	
<b>100</b>	Metal Shell Per MIL-DTL-83513	<b>R</b>	Polyphenylene Sulfide (Ryton)	<b>A</b>	Anodize (Black)		<b>09</b>
				<b>C</b>	Cadmium (Black Chromate)		<b>15</b>
				<b>G</b>	Gold		<b>21</b>
				<b>N</b>	Electroless Nickel		<b>25</b>
				<b>T</b>	Nickel Teflon		<b>31</b>
				<b>K</b>	Zinc Nickel		<b>37</b>

5. Contact Type		6. Type		7. Hardware		8. Jackpost Length	
<b>P-</b>	Plug (Pin)	<b>CS</b>	Solder-less	<b>P-</b>	Jackpost	<b>.490</b>	.490" Long
<b>S-</b>	Receptacle (Socket)					<b>.520</b>	.520" Long

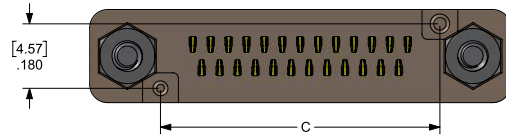
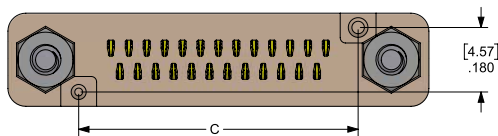
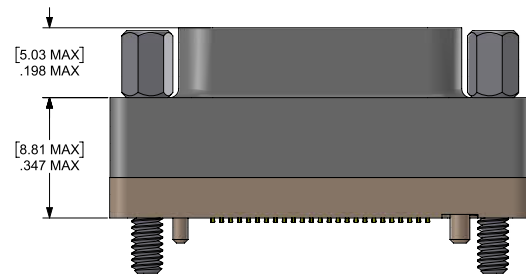
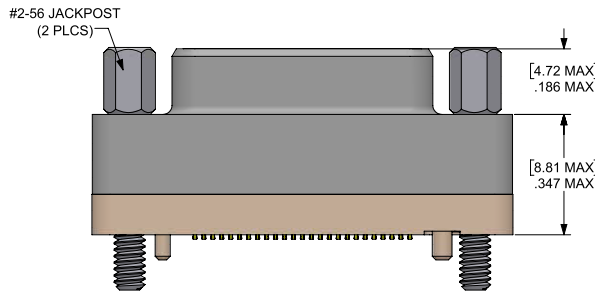
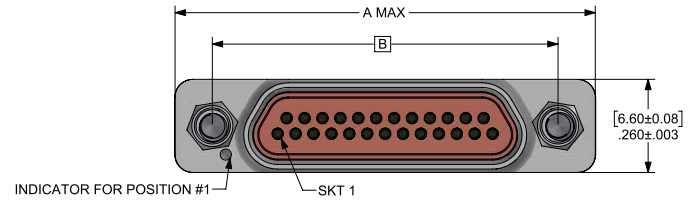
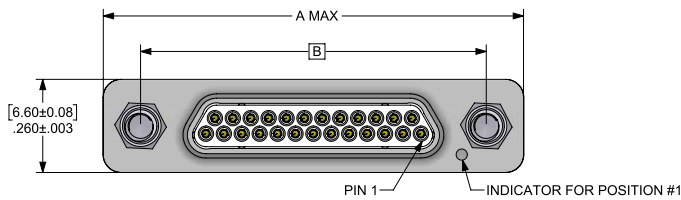
MICRO-D

# MICRO-D SOLDER-LESS SURFACE MOUNT SERIES SSMM **Amphenol**CANADA



## PLUG

## RECEPTACLE



Dimensions are in inch(mm)

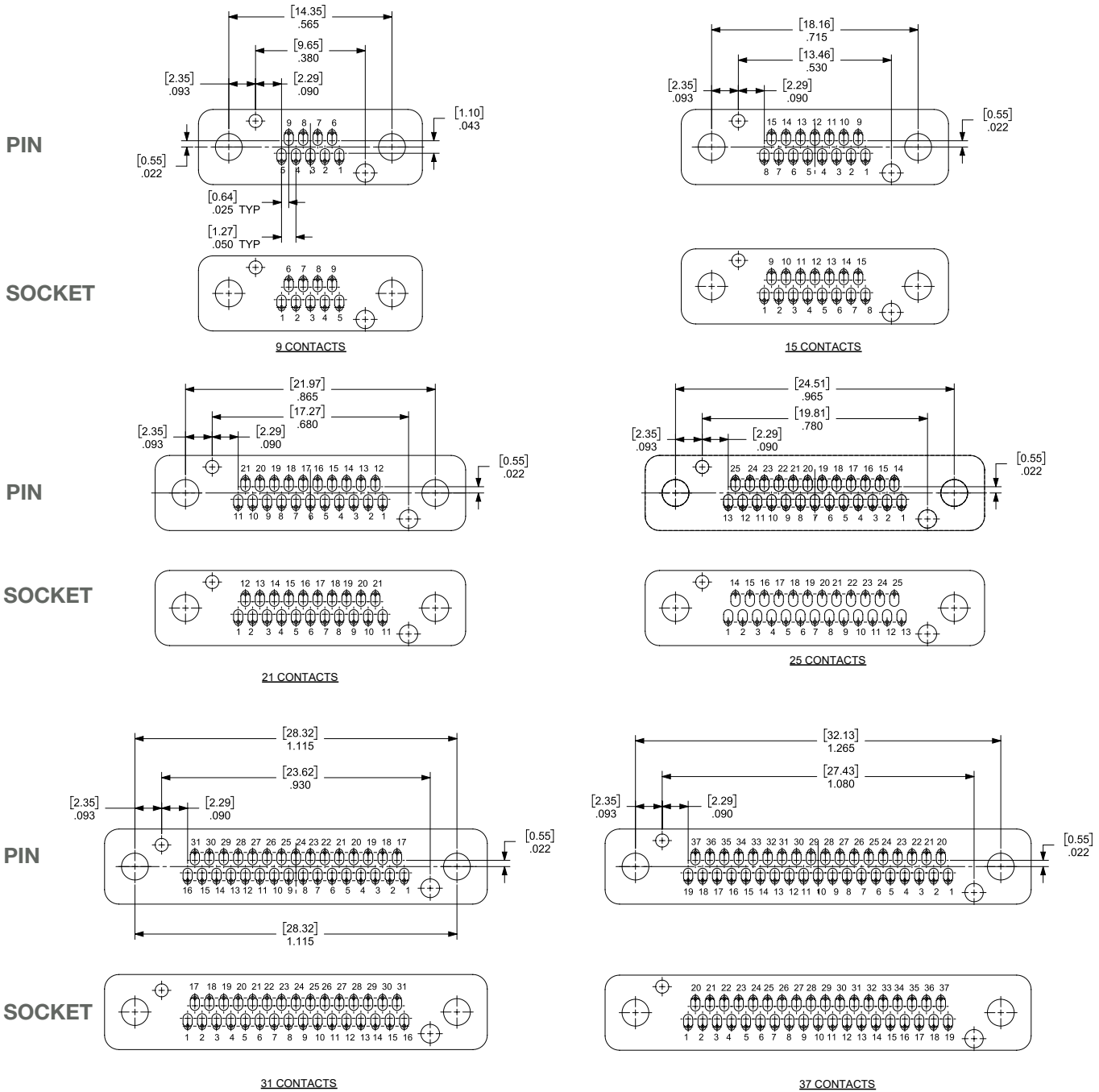
SIZE	A MAX	B	C
09	.776 (19.71)	.565 (14.35)	.380
15	.926 (23.52)	.715 (18.16)	.530
21	1.076 (27.33)	.865 (21.97)	.680
25	1.176 (29.87)	.965 (24.51)	.780
31	1.326 (33.68)	1.115 (28.32)	.930
37	1.476 (37.49)	1.265 (32.13)	1.080



# MICRO-D SOLDER-LESS SURFACE MOUNT SERIES SSMM

## SSMM TERMINATION TYPE PC CONFIGURATION

MICRO-D



## How to Order

## FEATURES

- A range of filtered MIL-DTL-83513 Micro-D products for military and aerospace applications.
- Small filter connectors which employ monolithic planar capacitors in a rugged, high density package
- Ideally suited for applications where space and weight is restricted.
- Available in a variety of filter types and mechanical configurations including wired harnesses and PCB terminations.
- Fully intermateable with all standard MIL-DTL-83513 connectors and meet the applicable performance and environmental requirements.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
RoHS Compliance	Connector Series	Connector Size	Connector Type	Termination Type	Wire Lead Length	Mounting Style	Insert Option	Filter Type	Filter Value	Plating	Deviation
	M13-	21	P	1	P	P	T	C	1	1-	000

### 1. RoHS Compliance

<b>E</b>	RoHS Compliant
	Blank for Non-RoHS

### 2. Connector Series

<b>M13-</b>	Filtered Micro-D
-------------	------------------

### 3. Connector Size (Number of Contacts)

<b>09</b>
<b>15</b>
<b>21</b>
<b>25</b>
<b>31</b>
<b>37</b>

### 4. Connector Type

<b>P</b>	Plug (Pin)
<b>S</b>	Receptacle (Socket)

### 5. Termination Type

<b>1</b>	Vertical PCB "BS"
<b>2</b>	Vertical PCB "C6"
<b>3</b>	Solder Cup
<b>4</b>	Right Angle PCB "CBR"
<b>5</b>	Solid Wire Straight
<b>6</b>	Stranded Wire

### 6. Wire/Lead Length

	Omit for Solder Cup
<b>1</b>	.109" ±.015
<b>2</b>	.140" ±.015
<b>3</b>	.172" ±.015
<b>4</b>	.250" ±.015

### 7. Mounting Style

<b>A</b>	.093" Mounting Hole
<b>B</b>	.125" Mounting Hole
<b>L</b>	Jackpost (Loose)
<b>P</b>	Jackpost (Fixed)

### 8. Insert Option

	Omit if not Used
<b>T</b>	Threaded Insert (PCB Termination Only)

### 10. Filter Value pF+100%/-0%

<b>A</b>	200
<b>B</b>	400
<b>C</b>	800
<b>1</b>	1000
<b>2</b>	2000
<b>4</b>	4000
<b>8</b>	8000
<b>T</b>	10,000
<b>H</b>	16,000
<b>0</b>	Mixed Cap

### TERMINATION TYPE 6 (INCHES +1.00/-0.00)

<b>A</b>	18.00 per M22759/11-26 (MIL-STD-681, System 1)
<b>B</b>	36.00 per M22759/11-26 (MIL-STD-681, System 1)
<b>C</b>	72.00 per M22759/11-26 (MIL-STD-681, System 1)

### 11. Plating

<b>1-</b>	Electroless Nickel
<b>2-</b>	Tin
<b>3-</b>	Cadmium (Clear Chromate)
<b>4-</b>	Gold
<b>5-</b>	Zinc Nickel

### 12. Deviation

<b>000</b>	Standard
<b>XXX</b>	Custom

### 9. Filter Type

<b>P</b>	Pi Filter
<b>C</b>	C Filter
<b>0</b>	Non-Filtered Equivalent Part

# MICRO-D FILTERED CONNECTORS

## SERIES M13

### Specifications

**TABLE 1: ELECTRICAL CHARACTERISTICS-C FILTER**

FILTER CIRCUITS		C, CLR, LRC					
		150 - 300	300 - 500	600 - 1200	1200 - 3200	4000 - 8000	8000 - 16000
Capacitance (pF) (@ 25 C, 1 kHz and 1.0 VRMS)		150 - 300	300 - 500	600 - 1200	1200 - 3200	4000 - 8000	8000 - 16000
Insertion Loss (dB min.) (per MIL-STD-220 @ 25 C and no load)	.1 MHz	-	-	-	-	-	-
	1 MHz	-	-	-	-	-	-
	10 MHz	-	-	2	5	13	18
	100 MHz	6	12	17	24	33	40
	1000 MHz	25	31	38	43	54	60
Working Voltage (VDC) @ 25 C & sea level		100					
Dielectric Withstanding Voltage (VDC) @ 25 C and 50 mA max. charging current		300					
Insulation Resistance (Gohms) @ 25 C and working voltage		5					
Contact Current Rating (continuous max. DC amperes)		3					
Filter RF Current Rating (amperes) (max. @ any frequency)		0.3					

**TABLE 2: ELECTRICAL CHARACTERISTICS-PI FILTER**

FILTER CIRCUITS		C, CLR, LRC					
		150 TO 300	300 TO 500	600 TO 1200	1200 TO 3200	4000 TO 8000	8000 TO 16000
Capacitance (pF) (@ 25 C, 1 kHz and 1.0 VRMS)		150 TO 300	300 TO 500	600 TO 1200	1200 TO 3200	4000 TO 8000	8000 TO 16000
Insertion Loss (dB min.) (per MIL-STD-220 @ 25 C and no load)	.1 MHz	-	-	-	-	-	-
	1 MHz	-	-	-	-	-	3
	10 MHz	-	-	2	5	13	18
	100 MHz	7	12	18	26	45	57
	1000 MHz	30	42	53	60	60	60
Working Voltage (VDC) (@ 25 C & sea level)		100					
Dielectric Withstanding Voltage (VDC) (@ 25 C and 50 mA max. charging current)		300					
Insulation Resistance (Gohms) @ 25 C and working voltage		5					
Contact Current Rating (continuous max. DC amperes)		3					
Filter RF Current Rating (amperes) (max. @ any frequency)		0.3					

MICRO-D

## Specifications

TABLE 3: MATERIAL AND FINISHES	
Connector Shell:	Aluminum Alloy
Insulator:	Polyphenylene Sulfide (PPS)
Seals:	Silicone Rubber or Equivalent
Pin Contact:	Beryllium Copper with 50 micro-inches gold over nickel plating
Socket Contact:	Copper alloy with 50 micro-inches gold over nickel plating
Hardware:	300 series stainless steel
PCB Terminals:	Gold plated copper alloy, solder dipped
Capacitors:	Planar ceramic array
Inductors:	Ferrite
EMI Ground Spring:	Beryllium Copper
Encapsulant:	Thermally conductive epoxy

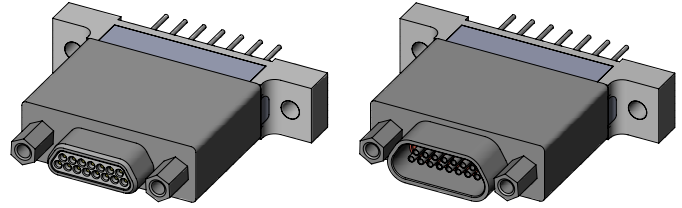
TABLE 4: QUALITY CONFORMANCE INSPECTION	
Series M13 connectors have been extensively qualified per the requirements of MIL-DTL-83513. All products shipped have the following inspection tests:	<ul style="list-style-type: none"> <li>• 100% visual and mechanical inspections</li> <li>• 100% capacitance, DWV, insulation resistance and dissipation factor testing</li> <li>• Sample insertion loss testing (AQL 1.0%)</li> </ul>
For high reliability applications, the following inspection tests or certifications are also available:	<ul style="list-style-type: none"> <li>• Thermal shock</li> <li>• Elevated temperature voltage conditioning</li> <li>• Elevated temperature insulation resistance and capacitance</li> <li>• Outgassing per JSC-SPR-0022 for space-borne applications</li> <li>• Baseline and single lot date code manufacturing</li> <li>• Other tests as required (consult the factory)</li> </ul>

# MICRO-D FILTERED CONNECTORS

## SERIES M13

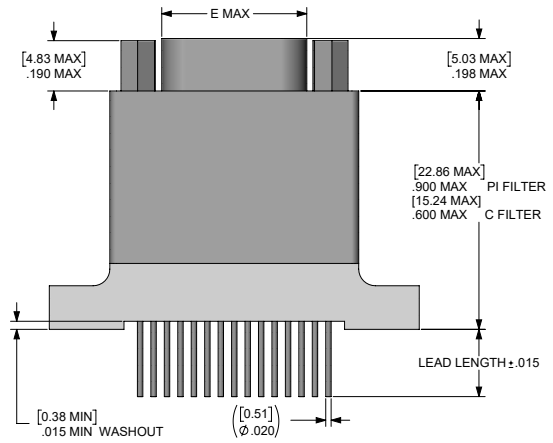
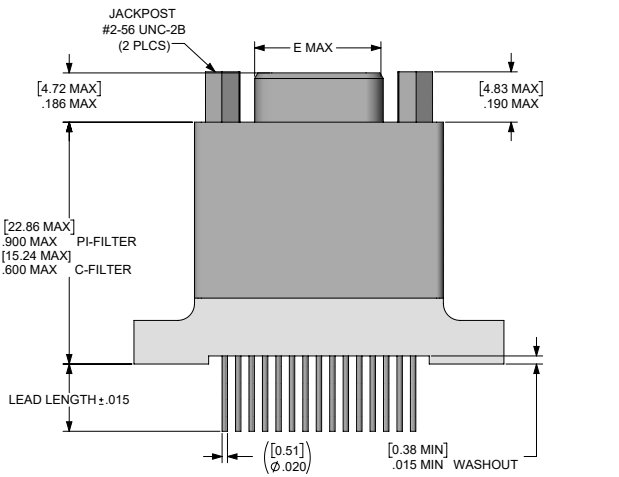
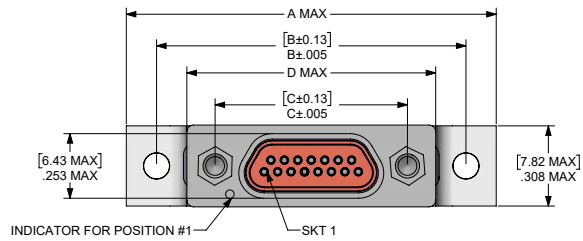
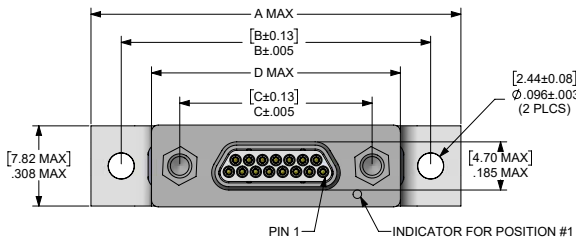
### Termination Type 1

VERTICAL PCB "BS"



PLUG

RECEPTACLE



MICRO-D

Dimensions are in inch(mm)

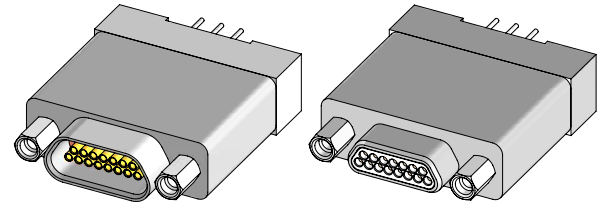
SIZE	A MAX	B ±.005 (0.13)	C ±.005 (0.13)	D MAX	E MAX	
					PLUG	RCPT
09	1.390 (35.31)	1.150 (29.21)	.565 (14.35)	.788 (20.02)	.334 (8.48)	.402 (10.21)
15			.715 (18.16)	.935 (23.75)	.484 (12.29)	.552 (14.02)
21	1.690 (42.93)	1.450 (36.83)	.865 (21.97)	1.085 (27.56)	.634 (16.10)	.702 (17.83)
25	1.740 (44.20)	1.500 (38.10)	.965 (24.51)	1.185 (30.10)	.734 (18.64)	.802 (20.37)
31	2.040 (51.82)	1.800 (45.72)	1.115 (28.32)	1.335 (33.91)	.884 (22.45)	.952 (24.18)
37	2.340 (59.44)	2.100 (53.34)	1.265 (32.13)	1.485 (37.72)	1.034 (26.26)	1.102 (27.99)

Refer to page 26 for straight PC configurations.

Contact Amphenol Canada for more information at 416-291-4401 • [www.amphenolcanada.com](http://www.amphenolcanada.com)  
 Download 2D drawings & 3D models using our online configurator.

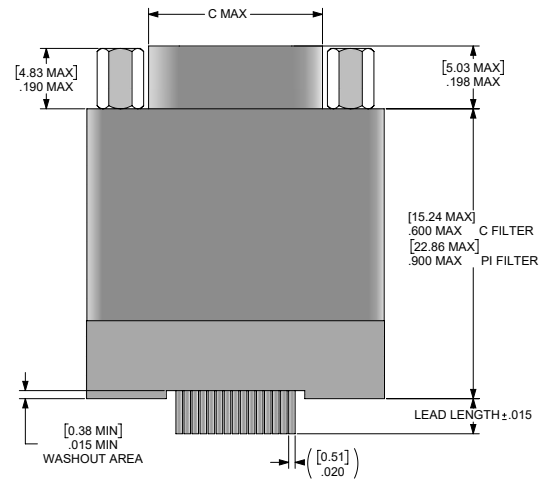
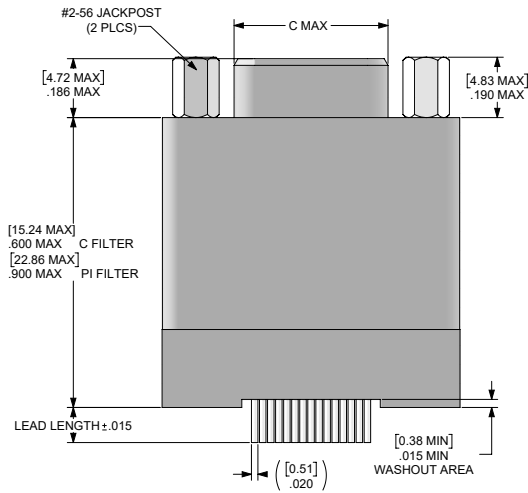
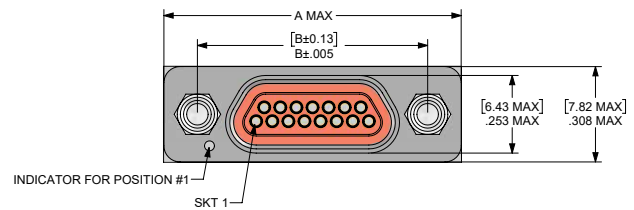
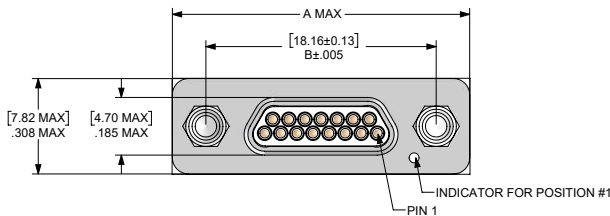
## Termination Type 2

VERTICAL PCB "C6"



**PLUG**

**RECEPTACLE**



Dimensions are in inch(mm)

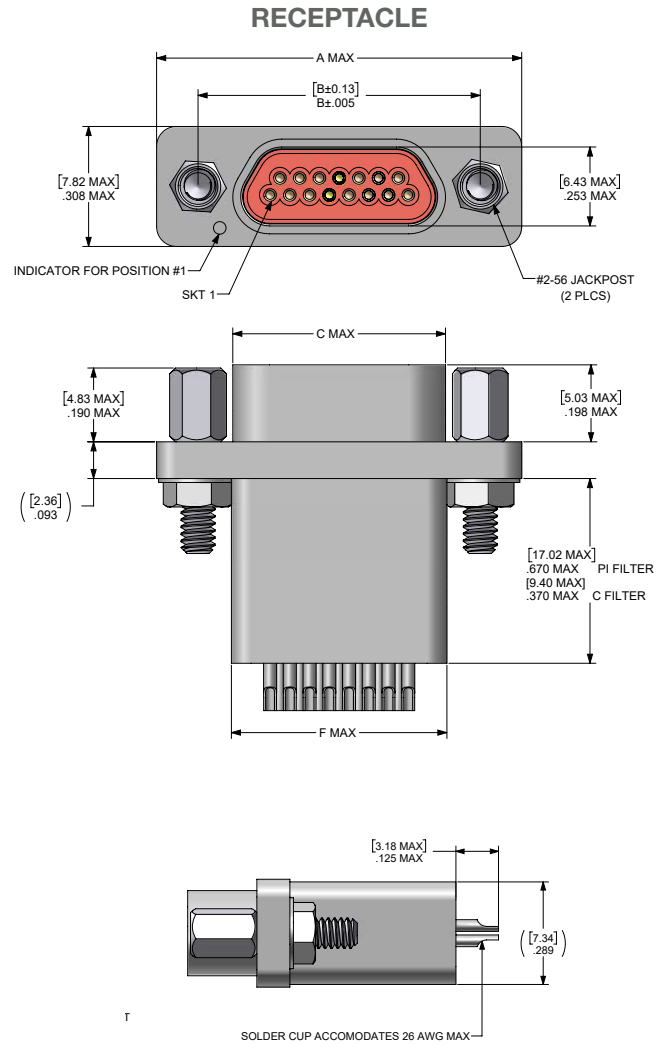
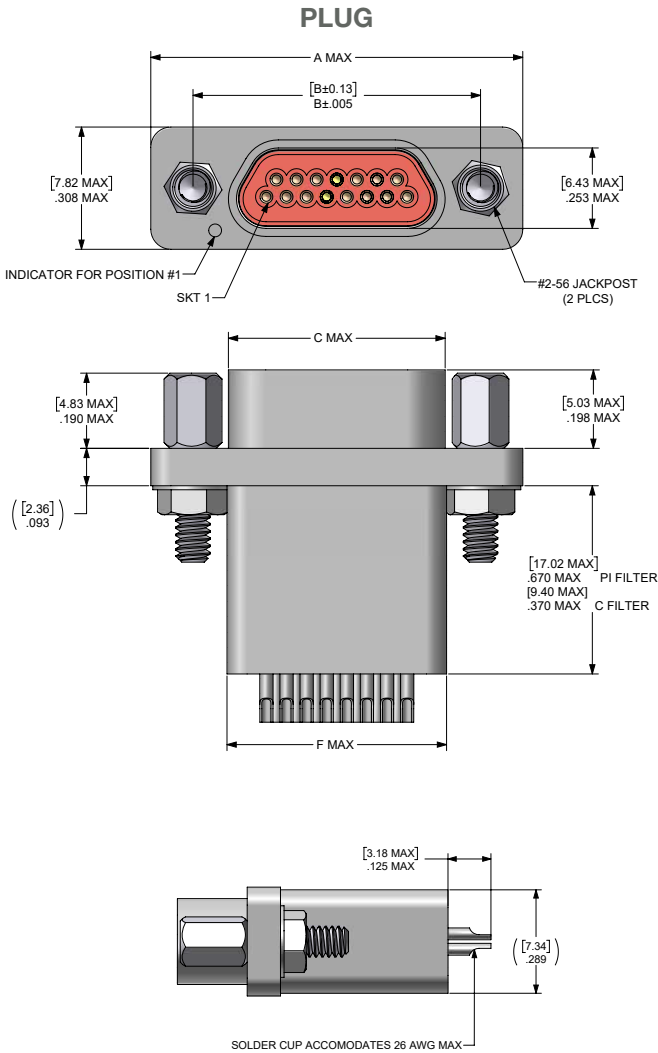
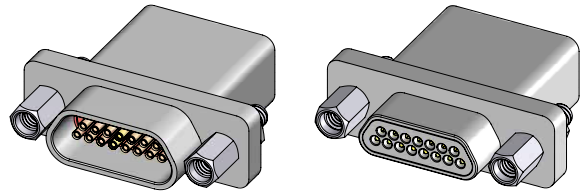
SIZE	A MAX	B ±.005 (0.13)	C MAX	
			PLUG	RCPT
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.402 (10.21)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.552 (14.02)
21	1.085 (27.56)	.865 (21.97)	.634 (16.10)	.702 (17.83)
25	1.185 (30.10)	.965 (24.51)	.734 (18.64)	.802 (20.37)
31	1.335 (33.91)	1.115 (28.32)	.884 (22.45)	.952 (24.18)
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.102 (27.99)

Refer to page 29 for straight PC configurations.

# MICRO-D FILTERED CONNECTORS SERIES M13

## Termination Type 3

SOLDER CUP



MICRO-D

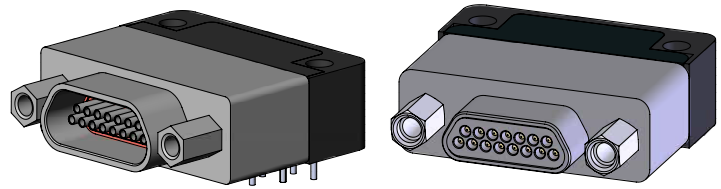
Dimensions are in inch(mm)

SIZE	A MAX	B $\pm 0.005$ (0.13)	C MAX		F MAX
			PLUG	RCPT	
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.402 (10.21)	.400 (10.16)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.552 (13.97)	.550 (13.97)
21	1.085 (27.56)	.865 (21.97)	.634 (16.10)	.702 (17.83)	.700 (17.78)
25	1.185 (30.10)	.965 (24.51)	.734 (18.64)	.802 (20.37)	.800 (20.32)
31	1.335 (33.91)	1.115 (28.32)	.884 (22.45)	.952 (24.18)	.950 (24.13)
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.102 (27.99)	1.100 (27.94)



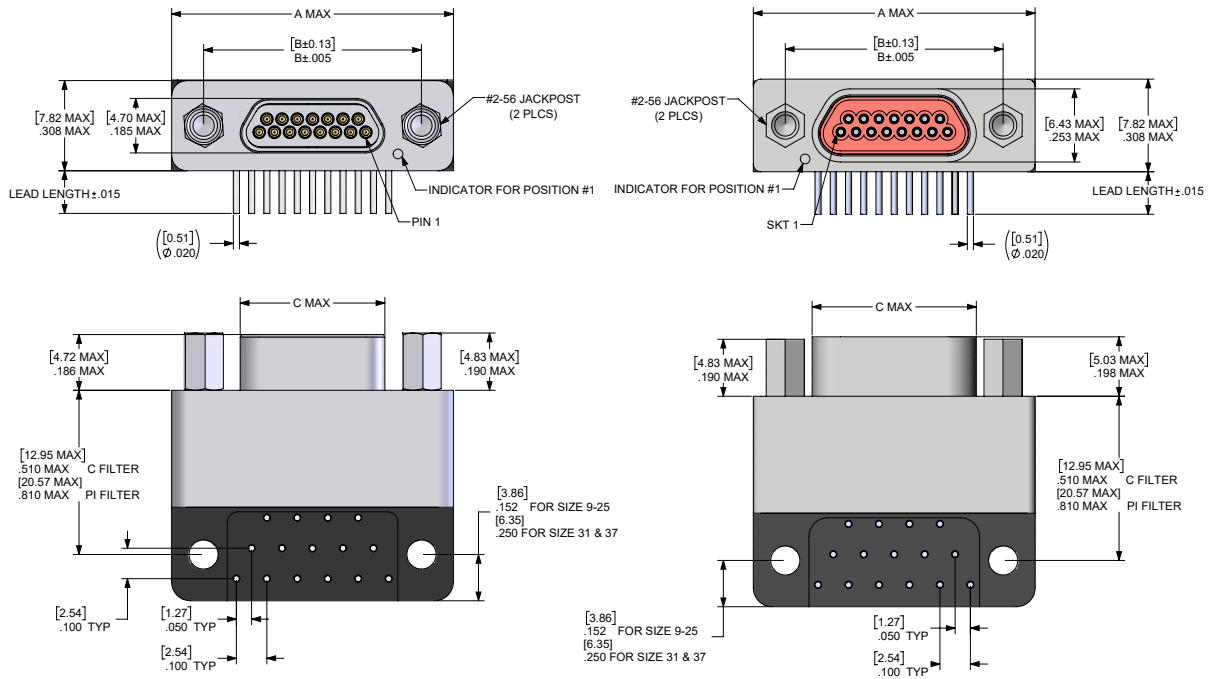
## Termination Type 4

RIGHT ANGLE PCB "CBR"



PLUG

RECEPTACLE



Dimensions are in inch(mm)

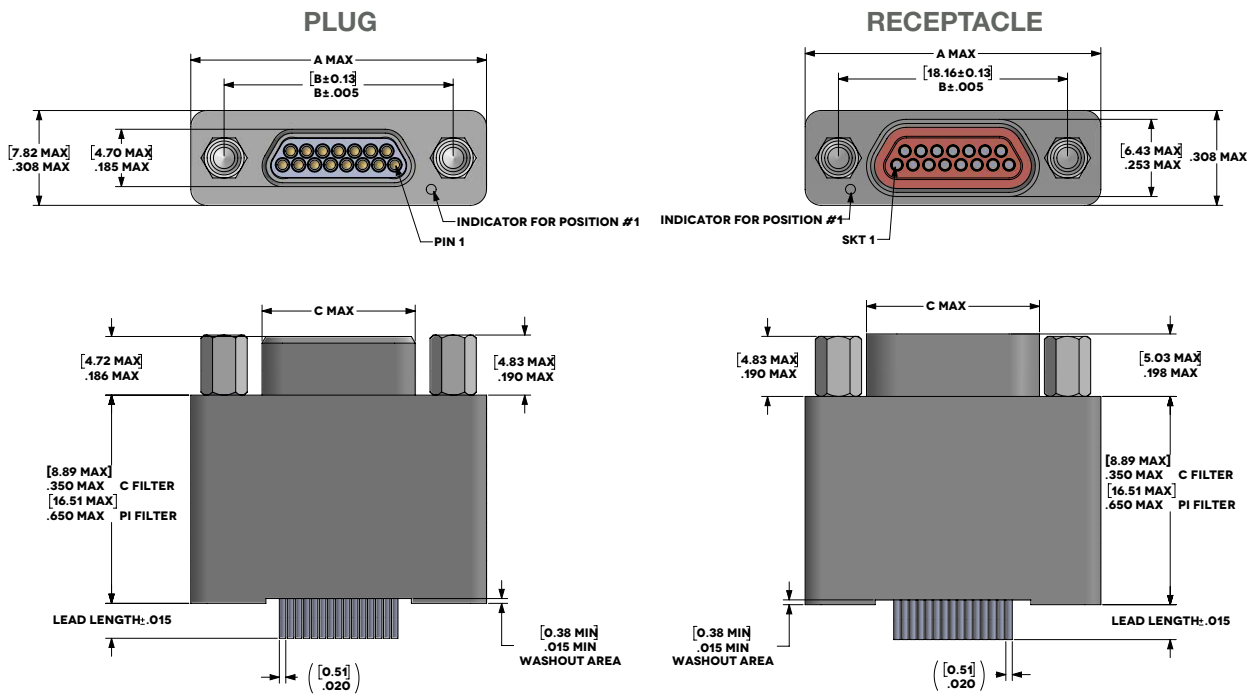
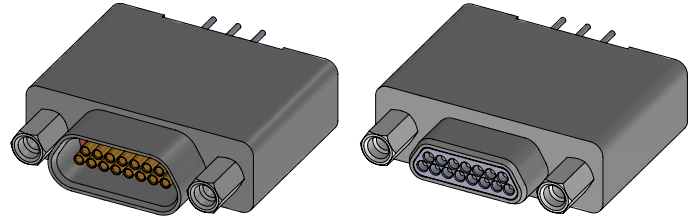
SIZE	A MAX	B ±.005 (0.13)	C MAX	
			PLUG	RCPT
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.402 (10.21)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.552 (13.97)
21	1.085 (27.56)	.865 (21.97)	.634 (16.10)	.702 (17.83)
25	1.185 (30.10)	.965 (24.51)	.734 (18.64)	.802 (20.37)
31	1.335 (33.91)	1.115 (28.32)	.884 (22.45)	.952 (24.18)
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.102 (27.99)

Refer to page 19 for right angle (90 DEG) PC configurations.

# MICRO-D FILTERED CONNECTORS SERIES M13

## Termination Type 5

SOLID WIRE STRAIGHT



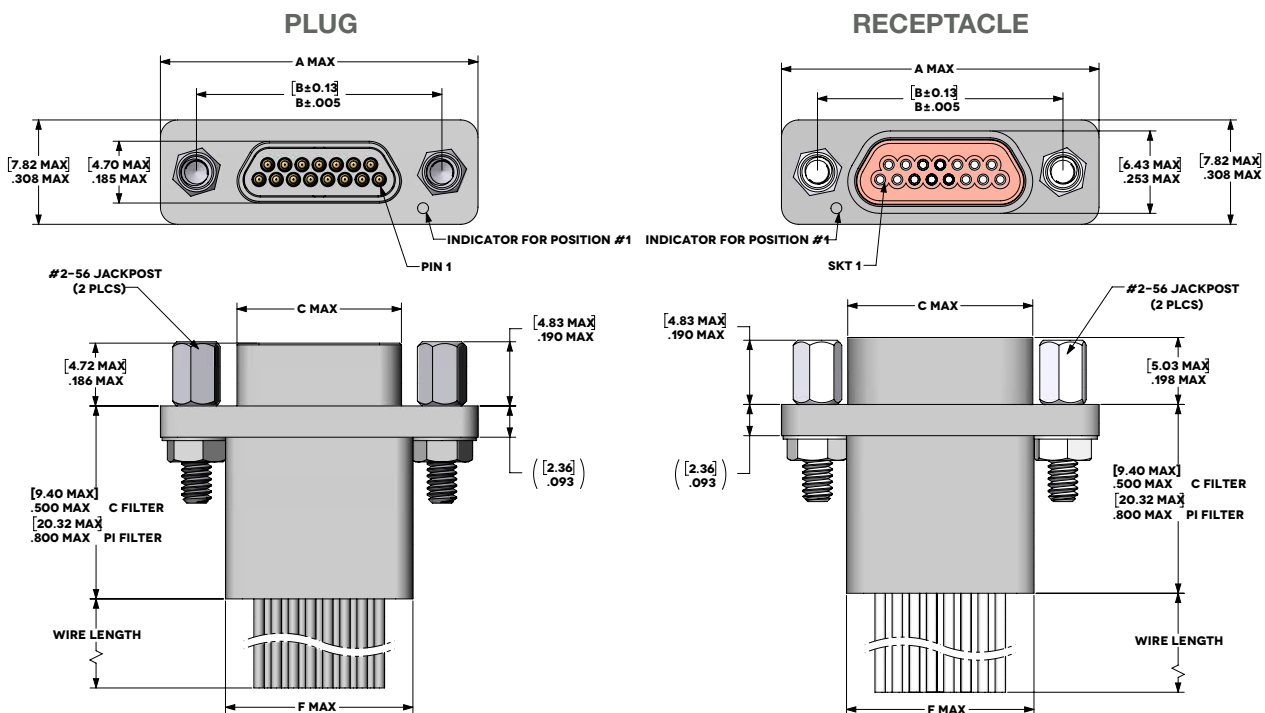
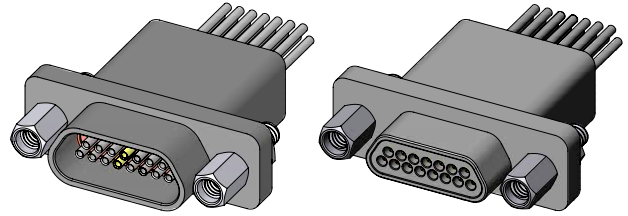
MICRO-D

Dimensions are in inch(mm)

SIZE	A MAX	B ±.005 (0.13)	C MAX	
			PLUG	RCPT
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.402 (10.21)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.552 (13.97)
21	1.085 (27.56)	.865 (21.97)	.634 (16.10)	.702 (17.83)
25	1.185 (30.10)	.965 (24.51)	.734 (18.64)	.802 (20.37)
31	1.335 (33.91)	1.115 (28.32)	.884 (22.45)	.952 (24.18)
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.102 (27.99)

## Termination Type 6

STRANDED WIRE STRAIGHT



Dimensions are in inch(mm)

SIZE	A MAX	B ±.005 (0.13)	C MAX		F MAX
			PLUG	RCPT	
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.402 (10.21)	.400 (10.16)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.552 (13.97)	.550 (13.97)
21	1.085 (27.56)	.865 (21.97)	.634 (16.10)	.702 (17.83)	.700 (17.78)
25	1.185 (30.10)	.965 (24.51)	.734 (18.64)	.802 (20.37)	.800 (20.32)
31	1.335 (33.91)	1.115 (28.32)	.884 (22.45)	.952 (24.18)	.950 (24.13)
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.102 (27.99)	1.100 (27.94)

# MICRO-D CONNECTOR SAVER

## SERIES 100, 101, 102 & 104

### How to Order

### FEATURES

- Space reduction (2-in-1 connector)
- Opposite mating genders
- No termination required; ready for use

1.	2.	3.	4.	5.	6.
Connector Series	Insulator Material	Shell Finish	Connector Size	Connector type	Hardware
100	R	N	09-	P/S-	B

1. Connector Series	
<b>100</b>	Metal Shell Per Mil-DTL-83513
<b>101</b>	Low Profile Per M83513/06-/09
<b>102</b>	All Plastic (Dimensionally identical to metal shell per M83513)
<b>104</b>	Stainless Steel Per M83513

2. Insulator Material	
<b>R</b>	Polyphenylene Sulfide (Ryton)

3. Shell Finish	
For Series 100 only	
<b>A</b>	Anodize (Black)
<b>C</b>	Cadmium (Black Chromate)
<b>G</b>	Gold
<b>I</b>	Iridite/Alodine
<b>N</b>	Electroless Nickel
<b>T</b>	Nickel Teflon

4. Connector Size (Number of Contacts)	
<b>09-</b>	
<b>15-</b>	
<b>21-</b>	
<b>25-</b>	
<b>31-</b>	
<b>37-</b>	
<b>51-</b>	
<b>69-</b>	
<b>100-</b>	
All sizes I.A. W M83513 Except size 69 (non-military)	

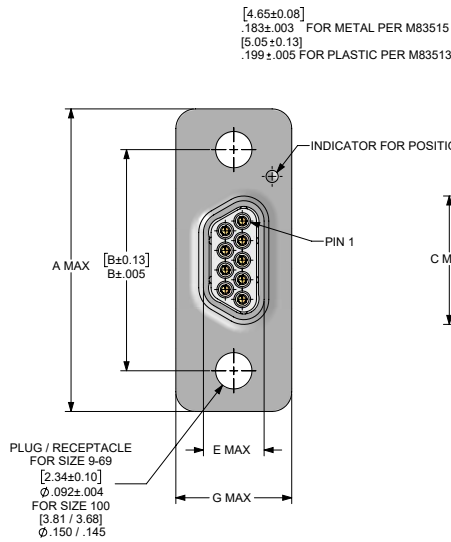
5. Connector Type	
<b>P/S-</b>	Connector Saver (Plug and Receptacle)

6. Hardware (Pre-installed by Factory)	
<b>B</b>	Standard Mounting Holes
<b>F</b>	Standard Float Mount
<b>R</b>	Reverse Float Mount
<b>P</b>	JackPost

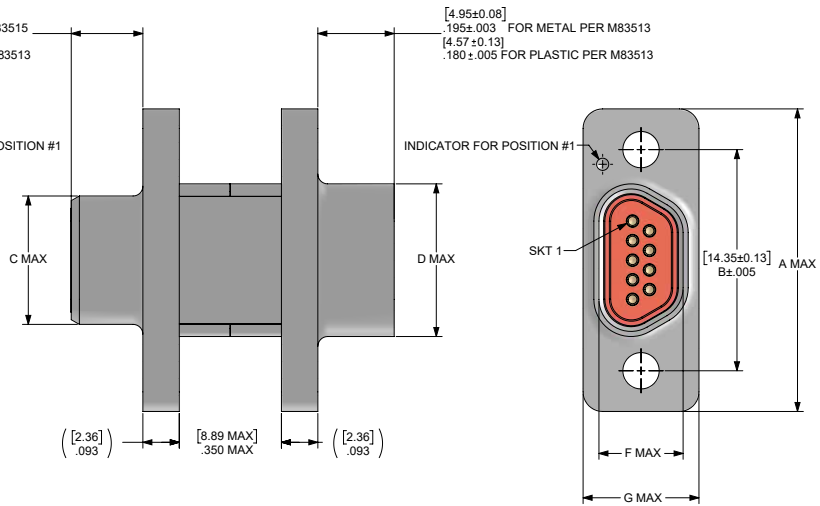
MICRO-D



### PLUG



### RECEPTACLE



(Face Seal Included for 100 Series Only)

### Series 100, 102 & 104

Dimensions are in inch(mm)

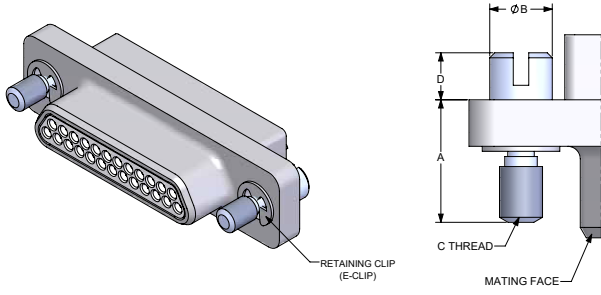
SIZE	A MAX	±.005 (0.13) B	C MAX	D MAX	E MAX	F MAX	G MAX
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.402 (10.21)	.185 (4.70)	.253 (6.43)	.308 (7.82)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.552 (14.02)			
21	1.085 (27.56)	.865 (21.97)	.634 (16.10)	.702 (17.83)			
25	1.185 (30.10)	.965 (24.51)	.734 (18.64)	.802 (20.37)			
31	1.335 (33.91)	1.115 (28.32)	.884 (22.45)	.952 (24.18)			
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.102 (27.99)	.228 (5.79)	.296 (7.52)	.351 (8.92)
51	1.435 (36.45)	1.215 (30.86)	.984 (24.99)	1.052 (26.72)			
69	1.735 (44.07)	1.515 (38.48)	1.289 (32.74)	1.357 (34.47)			
100	2.160 (54.86)	1.800 (45.72)	1.384 (35.15)	1.508 (38.30)	.271 (6.88)	.394 (10.01)	.394 (10.01)

### Series 101 Only

(Sizes 69-100 are not applicable)

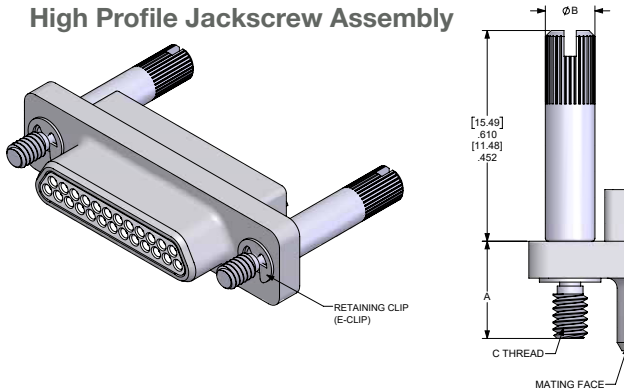
SIZE	A MAX	±.005 (0.13) B	C MAX	D MAX	E MAX	F MAX	G MAX
09	.788 (20.02)	.565 (14.35)	.292 (7.42)	.380 (9.65)	.134 (3.40)	.218 (5.54)	.218 (5.54)
15	.938 (23.82)	.715 (18.16)	.442 (11.23)	.530 (13.46)			
21	1.088 (27.64)	.865 (21.97)	.592 (15.04)	.680 (17.27)			
25	1.188 (30.18)	.965 (24.51)	.692 (17.58)	.780 (19.81)			
31	1.338 (33.99)	1.115 (28.32)	.842 (21.39)	.930 (23.62)			
37	1.488 (37.80)	1.265 (32.13)	.992 (25.10)	1.080 (27.43)	.177 (4.50)	.260 (6.60)	.260 (6.60)
51	1.438 (36.53)	1.215 (30.86)	.942 (23.93)	1.030 (26.16)			

## Low Profile Jackscrew Assembly



Shell Size	9-69		100	
Amphenol P/N	HM05-05	HM05-02	HM05-15	HM05-12
P/N Code	M5	M2	M5	M2
MIL-SPEC P/N	M83513/05-05 (Slot)	M83513/05-02 (Allen)	M83513/05-15 (Slot)	M83513/05-12 (Allen)
Dim. A	.258/.235 (6.55/5.97)		.287±.005 (7.29±0.13)	
Dim. B	.125 (3.18)		.187 (4.75)	
Dim. C (Thread)	#2-56 UNC-2A		#4-40 UNC-2A	
Dim. D	.103/.070 (2.62/1.78)		.098 (2.49)	

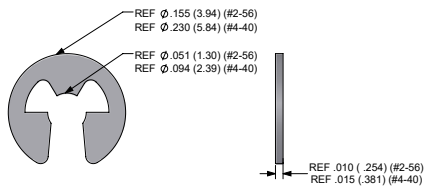
## High Profile Jackscrew Assembly



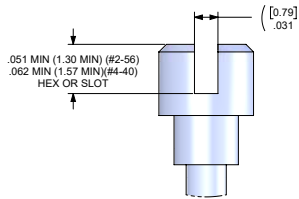
Shell Size	9-69		100	
Amphenol P/N	HM05-06	HM05-03	HM05-16	HM05-13
P/N Code	M6	M3	M6	M3
MIL-SPEC P/N	M83513/05-06 (Slot)	M83513/05-03 (Allen)	M83513/05-16 (Slot)	M83513/05-13 (Allen)
Dim. A	.258/.235 (6.55/5.97)		.287±.005 (7.29±0.13)	
Dim. B	.125 (3.18)		.187 (4.75)	
Dim. C (Thread)	#2-56 UNC-2A		#4-40 UNC-2A	

MICRO-D

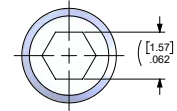
### Retaining Clip Detail



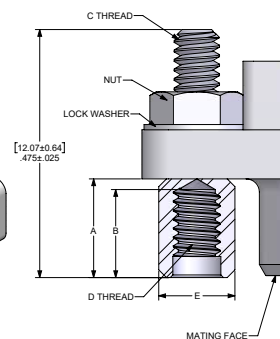
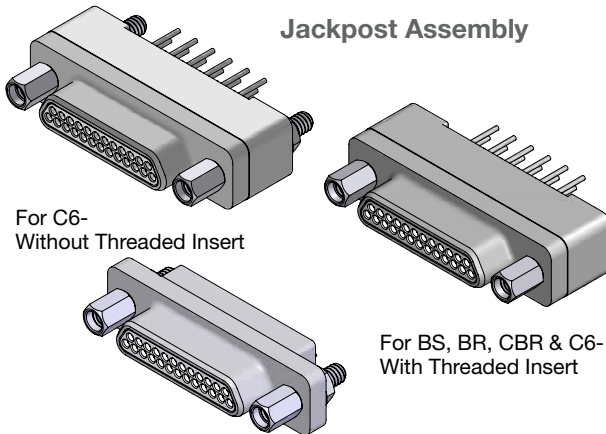
### Slot Head Detail



### Allen Head Detail

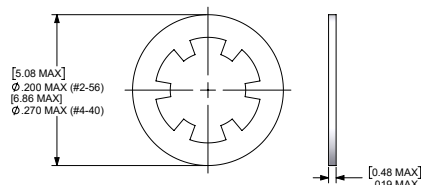


### Jackpost Assembly

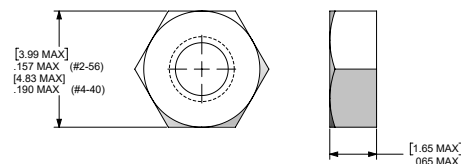


Shell Size	9-69	100
Amphenol P/N	HM05-07	HM05-17
P/N Code	P	
MIL-SPEC P/N	M83513/05-07	M83513/05-17
Dim. A	.190/.185 (4.83/4.70)	.185/.180 (4.70/4.58)
Dim. B	.155 (3.94)	.170 (4.32)
Dim. C (Thread)	#2-56 UNC-2A	#4-40 UNC-2A
Dim. D (Thread)	#2-56 UNC-2B	#4-40 UNC-2B
Dim. E (Hex)	.125 (3.18)	.187 (4.75)

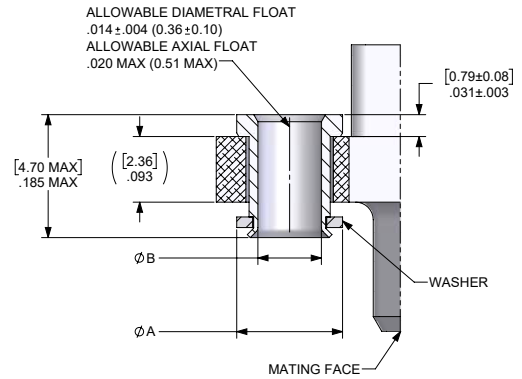
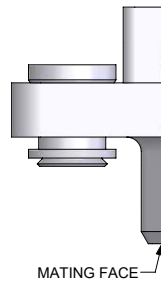
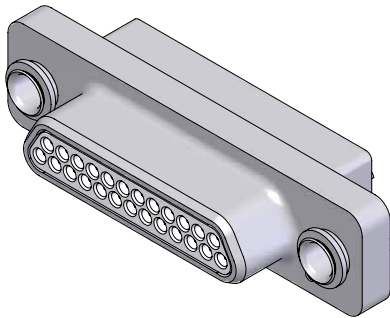
### Lock Washer Detail



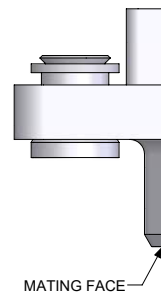
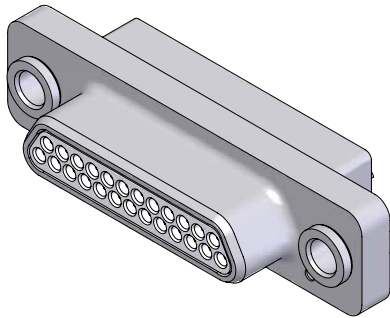
### Nut Detail



## Forward Float Mount

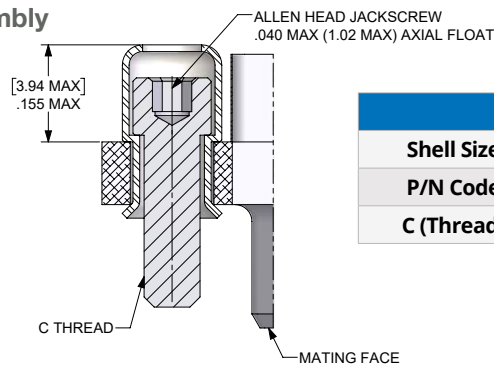
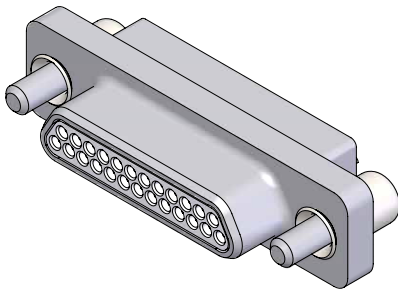


## Reverse Float Mount (Same dimensions as forward float mount)



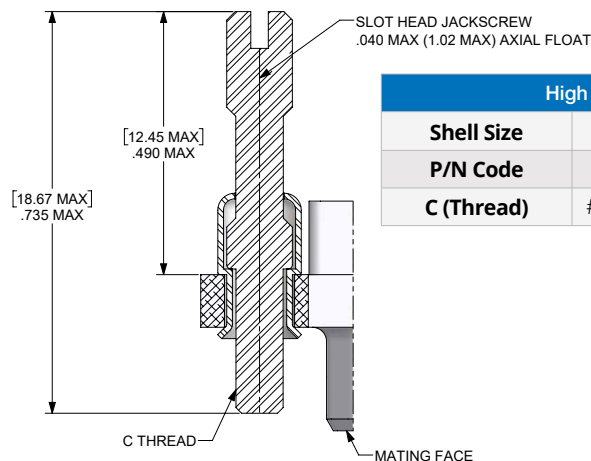
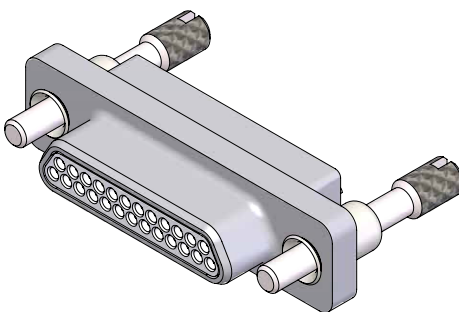
Float Mount		
Shell Size	9-69	100
P/N Code	F = Forward Float R = Reverse Flot	
A	$(3.81 \pm .076)$ $.150 \pm .003$	$(4.40 \pm 0.13)$ $.174 \pm .005$
B	$(2.99 \pm .0038)$ $.090 \pm .0015$	$(2.95 \pm .051)$ $.116 \pm .002$

## Low Profile Captive Jackscrew Assembly



Low Profile Captive		
Shell Size	9-69	100
P/N Code	L	
C (Thread)	#2-56 UNC-2A	#4-40 UNC-2A

## High Profile Captive Jackscrew Assembly



High Profile Captive		
Shell Size	9-69	100
P/N Code	K	
C (Thread)	#2-56 UNC-2A	#4-40 UNC-2A

Note: (Unless otherwise Specified)

1. Custom Hardware Pre-Installed by the Factory
2. Captive Hardware Provided Secure Mounting

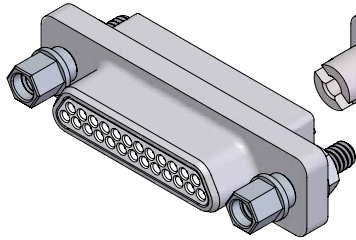
For Special design hardware, consult Amphenol sales for more options



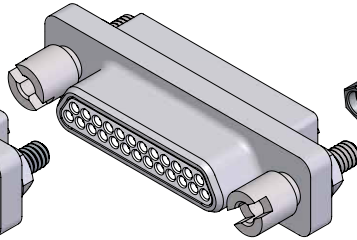
# MICRO-D STANDARD HARDWARE

## REAR PANEL MOUNT JACKPOST ASSEMBLY

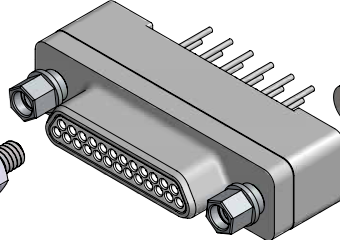
Hex Head-Long



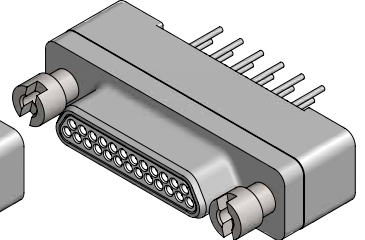
Slot Head-Long



Hex Head-Short

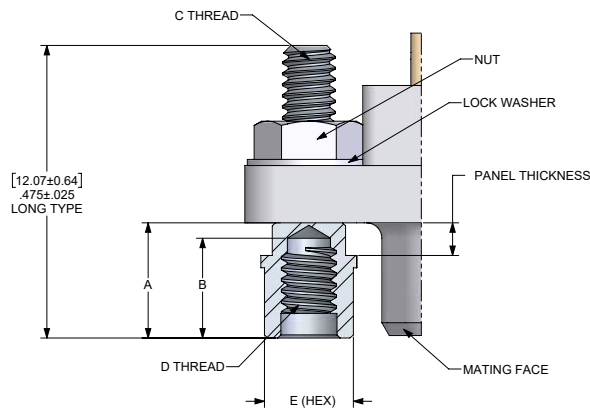


Slot Head-Short

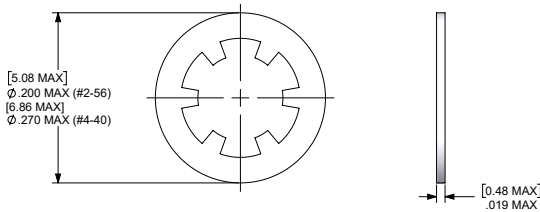


For C16, H16, Wires & Solder Cup

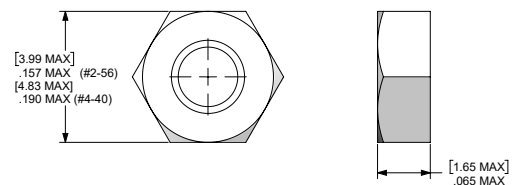
For BS, BR, CBR, HBR, C6 & H6



Lock Washer Detail



Nut Detail



Shell Size	9-69	100
<b>Amphenol P/N</b>	HM05-XX (See Table 3)	
<b>Panel Thickness Code</b>	PA / SA = .027" - .037" (0.69 - .094) PB / SB = .042" - .052" (1.07 - 1.32) PC / SC = .057" - .066" (1.45 - 1.68) PG / SG = .067" - .077" (1.70 - 1.96) PE / SE = .078" - .085" (1.98 - 2.16) PD / SD = .088" - .098" (2.24 - 2.49) PF / SF = .120" - .130" (3.05 - 3.30)	
<b>MIL-SPEC P/N</b>	N/A	
<b>Dim. A</b>	.185 / .190 (4.70 / 4.83)	.180 / .185 (4.58 / 4.70)
<b>Dim. B</b>	.155 (3.94)	.170 (4.32)
<b>Dim. C (Thread)</b>	#2-56 UNC-2A	#4-40 UNC-2A
<b>Dim. D (Thread)</b>	#2-56 UNC-2B	#4-40 UNC-2B
<b>Dim. E (Hex)</b>	.125 (3.18)	.187 (4.75)

MICRO-D

**TABLE 3: Sz 9-69**

CAT. #	Head Type	Thread	Description	Length
HM05-20	Slot	2-56	SA - Jackpost for .027"-.037" panel	Long
HM05-21	Slot	2-56	SB - Jackpost for .042"-.052" panel	Long
HM05-22	Slot	2-56	SC - Jackpost for .057"-.066" panel	Long
HM05-23	Slot	2-56	SD - Jackpost for .088"-.098" panel	Long
HM05-24	Slot	2-56	SE - Jackpost for .078"-.085" panel	Long
HM05-25	Slot	2-56	SF - Jackpost for .120"-.130" panel	Long
HM05-26	Slot	2-56	SG - Jackpost for .067"-.077" panel	Long
HM05-30	Hex	2-56	PA - Jackpost for .027"-.037" panel	Long
HM05-31	Hex	2-56	PB - Jackpost for .042"-.052" panel	Long
HM05-32	Hex	2-56	PC - Jackpost for .057"-.066" panel	Long
HM05-33	Hex	2-56	PD - Jackpost for .088"-.098" panel	Long
HM05-34	Hex	2-56	PE - Jackpost for .078"-.085" panel	Long
HM05-35	Hex	2-56	PF - Jackpost for .120"-.130" panel	Long
HM05-36	Hex	2-56	PG - Jackpost for .067"-.077" panel	Long
HM05-40	Slot	2-56	SA - Jackpost for .027"-.037" panel	Short
HM05-41	Slot	2-56	SB - Jackpost for .042"-.052" panel	Short
HM05-42	Slot	2-56	SC - Jackpost for .057"-.066" panel	Short
HM05-43	Slot	2-56	SD - Jackpost for .088"-.098" panel	Short
HM05-44	Slot	2-56	SE - Jackpost for .078"-.085" panel	Short
HM05-45	Slot	2-56	SF - Jackpost for .120"-.130" panel	Short
HM05-46	Slot	2-56	SG - Jackpost for .067"-.077" panel	Short
HM05-50	Hex	2-56	PA - Jackpost for .027"-.037" panel	Short
HM05-51	Hex	2-56	PB - Jackpost for .042"-.052" panel	Short
HM05-52	Hex	2-56	PC - Jackpost for .057"-.066" panel	Short
HM05-53	Hex	2-56	PD - Jackpost for .088"-.098" panel	Short
HM05-54	Hex	2-56	PE - Jackpost for .078"-.085" panel	Short
HM05-55	Hex	2-56	PF - Jackpost for .120"-.130" panel	Short
HM05-56	Hex	2-56	PG - Jackpost for .067"-.077" panel	Short

**TABLE 3 Sz 100**

CAT. #	Head Type	Thread	Description	Length
HM05-60	Slot	4-40	SA - Jackpost for .027"-.037" panel	Long
HM05-61	Slot	4-40	SB - Jackpost for .042"-.052" panel	Long
HM05-62	Slot	4-40	SC - Jackpost for .057"-.066" panel	Long
HM05-63	Slot	4-40	SD - Jackpost for .088"-.098" panel	Long
HM05-64	Slot	4-40	SE - Jackpost for .078"-.085" panel	Long
HM05-65	Slot	4-40	SF - Jackpost for .120"-.130" panel	Long
HM05-66	Slot	4-40	SG - Jackpost for .067"-.077" panel	Long
HM05-70	Hex	4-40	PA - Jackpost for .027"-.037" panel	Long
HM05-71	Hex	4-40	PB - Jackpost for .042"-.052" panel	Long
HM05-72	Hex	4-40	PC - Jackpost for .057"-.066" panel	Long
HM05-73	Hex	4-40	PD - Jackpost for .088"-.098" panel	Long
HM05-74	Hex	4-40	PE - Jackpost for .078"-.085" panel	Long
HM05-75	Hex	4-40	PF - Jackpost for .120"-.130" panel	Long
HM05-76	Hex	4-40	PG - Jackpost for .067"-.077" panel	Long
HM05-80	Slot	4-40	SA - Jackpost for .027"-.037" panel	Short
HM05-81	Slot	4-40	SB - Jackpost for .042"-.052" panel	Short
HM05-82	Slot	4-40	SC - Jackpost for .057"-.066" panel	Short
HM05-83	Slot	4-40	SD - Jackpost for .088"-.098" panel	Short
HM05-84	Slot	4-40	SE - Jackpost for .078"-.085" panel	Short
HM05-85	Slot	4-40	SF - Jackpost for .120"-.130" panel	Short
HM05-86	Slot	4-40	SG - Jackpost for .067"-.077" panel	Short
HM05-90	Hex	4-40	PA - Jackpost for .027"-.037" panel	Short
HM05-91	Hex	4-40	PB - Jackpost for .042"-.052" panel	Short
HM05-92	Hex	4-40	PC - Jackpost for .057"-.066" panel	Short
HM05-93	Hex	4-40	PD - Jackpost for .088"-.098" panel	Short
HM05-94	Hex	4-40	PE - Jackpost for .078"-.085" panel	Short
HM05-95	Hex	4-40	PF - Jackpost for .120"-.130" panel	Short
HM05-96	Hex	4-40	PG - Jackpost for .067"-.077" panel	Short

# MICRO-D EMI BACKSHELLS SERIES MBS

## How to Order

1.	2.	3.	4.	5.	6.	7.
Connector Series	Connector Size	Shell Finish	Exit Shape	Cable Exit Size	Exit Angle	Hardware
MBS-	09	N-	C	A	00	M5

### 1. Connector Series

<b>MBS-</b>	EMI Backshells
-------------	----------------

### 2. Connector Size (Number of Contacts)

<b>09</b>
<b>15</b>
<b>21</b>
<b>25</b>
<b>31</b>
<b>37</b>
<b>51</b>
<b>69</b>
<b>100</b>

### 3. Shell Finish

<b>A-</b>	Anodized (Black)
<b>C-</b>	Cadmium (Yellow Chromate)
<b>N-</b>	Electroless Nickel
<b>G-</b>	Gold
<b>K-</b>	Zinc Nickel - 48 Hrs
<b>T-</b>	Nickel Teflon
<b>Z-</b>	Customer Specified Plating

### 4. Exit Shape

<b>C</b>	Circular Cable Exit
<b>E</b>	Elliptical Cable Exit

### 5. Cable Exit Size

<b>A</b>
<b>B</b>
<b>C</b>
<b>D</b>
<b>E</b>
<b>F</b>
<b>G</b>
<b>H</b>
<b>J</b>

### 6. Exit Angle

<b>00</b>	Straight Exit
<b>90</b>	Right Angle Exit
<b>45</b>	45° Exit

### 7. Hardware

<b>M2</b>	Low Profile Allen (Hex) Head Jackscrew
<b>M5</b>	Low Profile Slot Head Jackscrew
<b>M6</b>	High Profile Slot Head Jackscrew
<b>P</b>	Jackpost

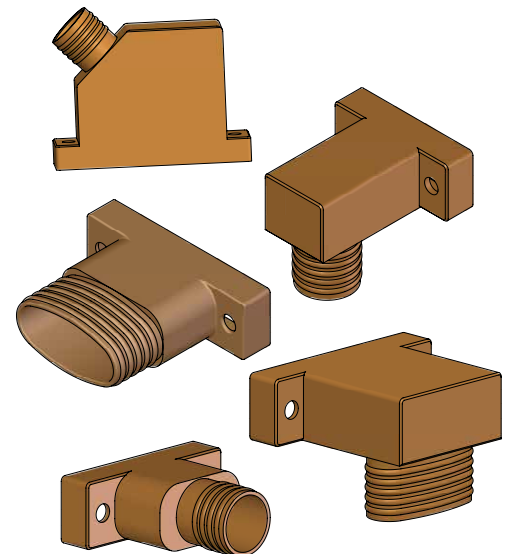
MICRO-D

## FEATURES

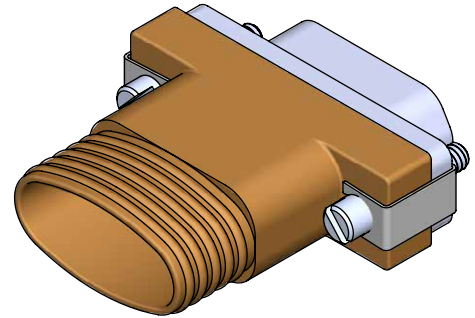
- Designed for use with M83513 connectors.
- It is a reliable means of providing EMI and strain relief for harnessed connectors.
- Available for sizes 9 thru 100.
- Accessible in straight, 45° or 90° configurations
- Round or elliptical exit port
- Backshells are machined from aluminum alloy and are offered with various plating options.

## PERFORMANCE INFORMATION

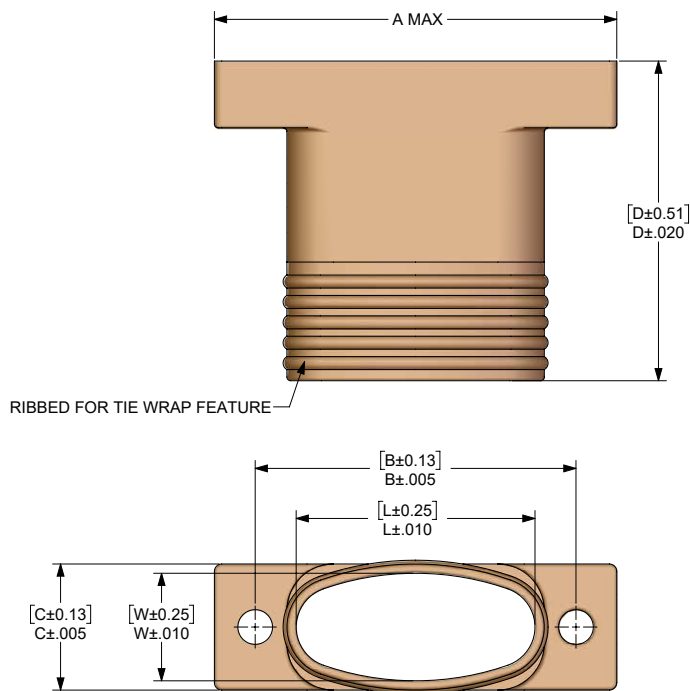
- Magnetic permeability (MIL-I-17214): less than 2 mu
- Shielding efficiency: to 1 GHz, 60 db to > 100 db
- Vibration (per MIL-STD-1344 Method 2004, condition C): no damage or discontinuity between shell and shield



Elliptical Straight Cable Exit



Connector Shown for Reference Only  
(Order Separately)

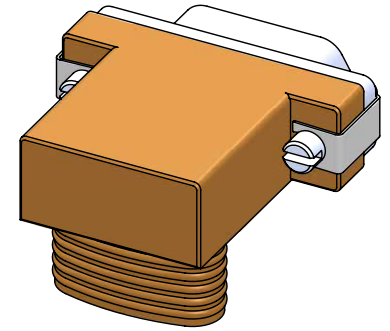


CABLE EXIT SIZE	W ±.010 (0.25)	L ±.010 (0.25)	AVAILABLE ON SIZE
A	.284 (7.21)	.344 (8.74)	09 THRU 100
B		.494 (12.55)	15 THRU 100
C		.644 (16.36)	21 THRU 100
D		.744 (18.90)	25 THRU 100
E		.894 (22.71)	31 THRU 100
F		.994 (25.25)	37 THRU 100
G		1.044 (26.52)	37, 69 & 100
J	.320 (8.13)	1.250 (31.75)	69 THRU 100
H	.384 (9.75)	1.520 (38.61)	100 ONLY

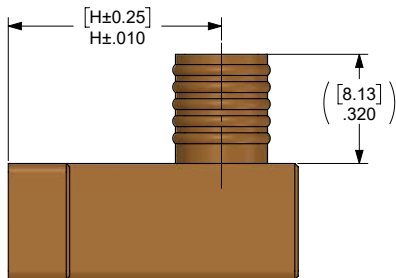
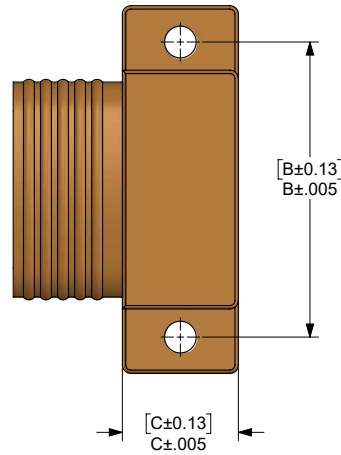
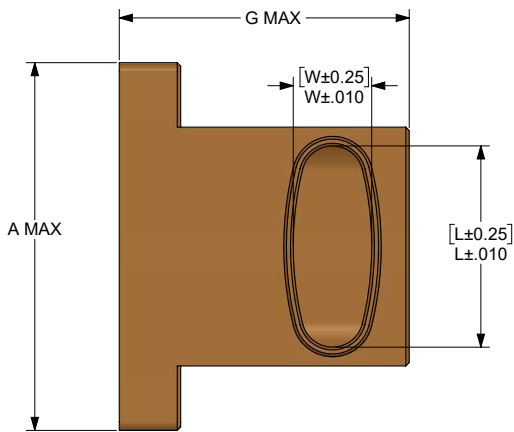
SIZE	A MAX	B ±.005 (0.13)	C ±.005 (0.13)	D ±.020 (0.51)
09	.785 (19.94)	.565 (14.35)	.340 (8.64)	.762 (19.35)
15	.935 (23.75)	.715 (18.16)		.812 (20.62)
21	1.085 (27.56)	.865 (21.97)		.862 (21.89)
25	1.185 (30.10)	.965 (24.51)		.912 (23.16)
31	1.335 (33.91)	1.115 (28.32)		.952 (24.18)
37	1.485 (37.72)	1.265 (32.13)	.992 (25.20)	
51	1.435 (36.45)	1.215 (30.86)	.400 (10.16)	1.072 (27.32)
69	1.735 (44.07)	1.515 (38.48)		1.102 (27.99)
100	2.175 (55.25)	1.800 (45.72)		1.137 (28.88)

# MICRO-D EMI BACKSHELLS SERIES MBS

## Elliptical Right Angle Cable exit



Connector Shown for Reference Only  
(Order Separately)

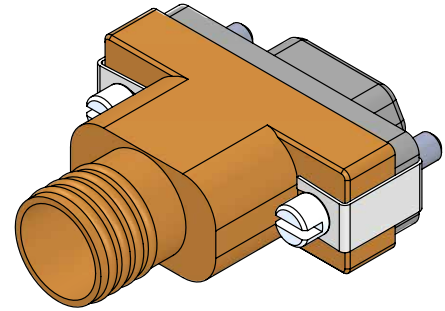


MICRO-D

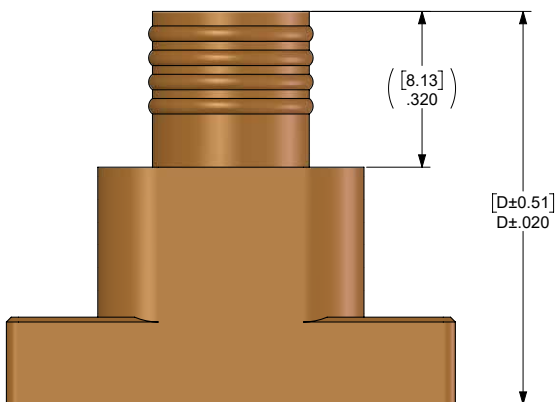
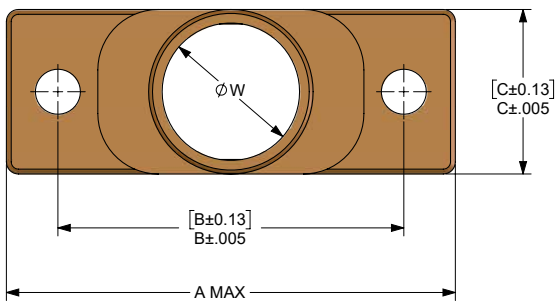
CABLE EXIT SIZE	W ±.010 (0.25)	L ±.010 (0.25)	AVAILABLE ON SIZE
A	.284 (7.21)	.344 (8.74)	09 THRU 100
B		.494 (12.55)	15 THRU 100
C		.644 (16.36)	21 THRU 100
D		.744 (18.90)	25 THRU 100
E		.894 (22.71)	31 THRU 100
F		.994 (25.25)	37 THRU 100
G		1.040 (26.42)	37, 69 & 100
H		.384 (9.75)	1.520 (38.61)

SIZE	A MAX	B ±.005 (0.13)	C ±.005 (0.13)	G MAX	H ±.010 (0.25)
09	.785 (19.94)	.565 (14.35)	.340 (8.64)	.865 (21.97)	.625 (15.88)
15	.935 (23.75)	.715 (18.16)			
21	1.085 (27.56)	.865 (21.97)			
25	1.185 (30.10)	.965 (24.51)			
31	1.335 (33.91)	1.115 (28.32)			
37	1.485 (37.72)	1.265 (32.13)	.400 (10.16)	.925 (23.50)	.645 (16.38)
51	1.435 (36.45)	1.215 (30.86)			
69	1.735 (44.07)	1.515 (34.48)			
100	2.175 (55.25)	1.800 (45.72)	.450 (11.43)	.960 (24.39)	.657 (16.69)

Circular Straight Cable Exit



Connector Shown for Reference Only  
(Order Separately)

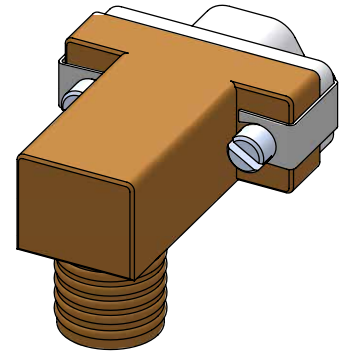


CABLE EXIT SIZE	W ±.010 (0.25)	AVAILABLE ON SIZE
A	.284 (7.21)	09 THRU 100
B	.344 (8.74)	15 THRU 100
C	.384 (9.75)	100 ONLY

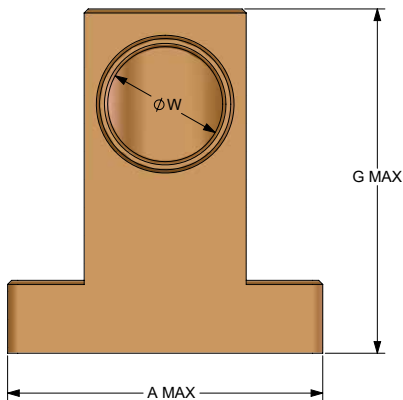
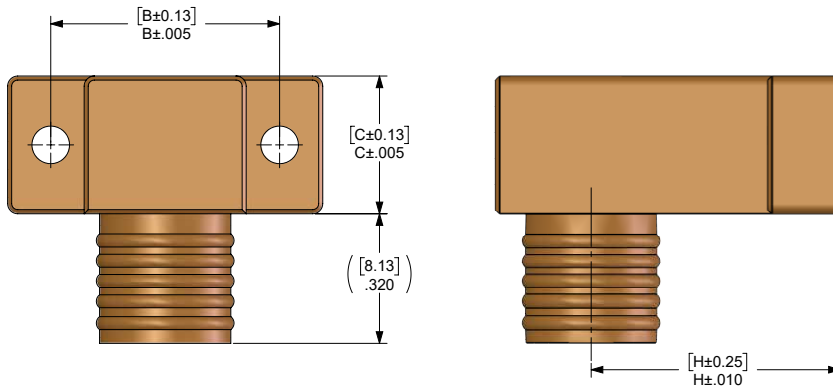
SIZE	A MAX	B ±.005 (0.13)	C ±.005 (0.13)	D ±.020
09	.785 (19.94)	.565 (14.35)	.340 (8.64)	.762 (19.35)
15	.935 (23.75)	.715 (18.16)		.812 (20.62)
21	1.085 (27.56)	.865 (21.97)		.862 (20.62)
25	1.185 (30.10)	.965 (24.51)		.912 (23.16)
31	1.335 (33.91)	1.115 (28.32)		.952 (24.18)
37	1.485 (36.45)	1.265 (32.13)	.400 (10.16)	.992 (25.20)
51	1.435 (36.45)	1.215 (30.86)		1.072 (27.32)
69	1.735 (44.07)	1.515 (34.48)		1.102 (27.99)
100	2.175 (55.25)	1.800 (45.72)	.450 (11.43)	1.137 (28.88)

# MICRO-D EMI BACKSHELLS SERIES MBS

## Circular Right Angle Cable Exit



Connector Shown for Reference Only  
(Order Separately)



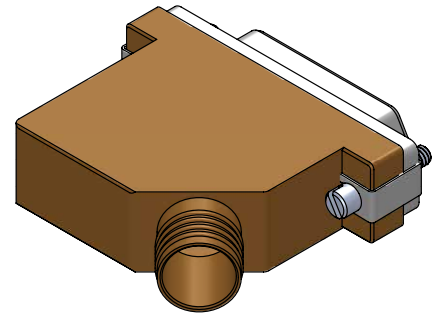
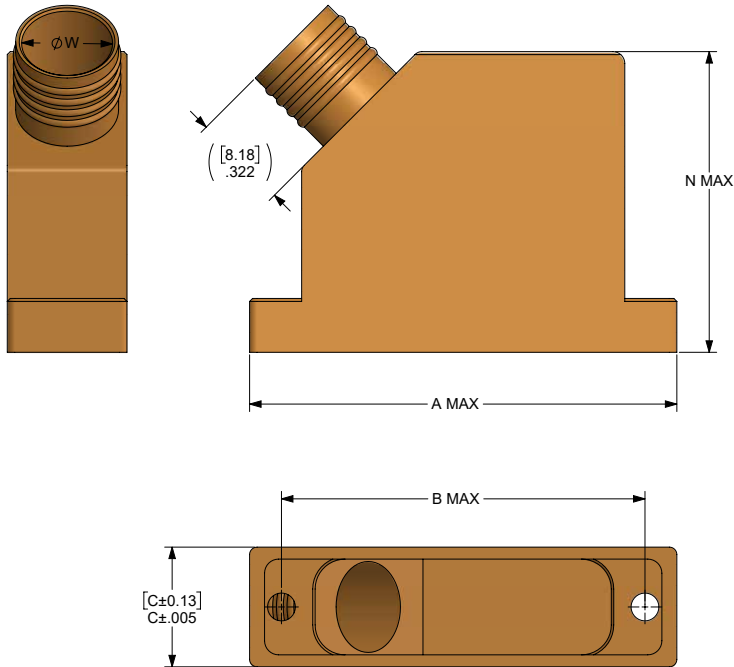
CABLE EXIT SIZE	W ±.010 (0.25)	AVAILABLE ON SIZE
A	.284 (7.21)	09 THRU 100
B	.344 (8.74)	15 THRU 100
C	.384 (9.75)	100 ONLY

SIZE	A MAX	B ±.005 (0.13)	C ±.005 (0.13)	G MAX	H ±.010 (0.25)
09	.785 (19.94)	.565 (14.35)	.340 (8.64)	.865 (21.97)	.625 (15.88)
15	.935 (23.75)	.715 (18.16)			
21	1.085 (27.56)	.865 (21.97)			
25	1.185 (30.10)	.965 (24.51)			
31	1.335 (33.91)	1.115 (28.32)			
37	1.485 (37.72)	1.265 (32.13)	.400 (10.16)	.925 (23.50)	.645 (16.38)
51	1.435 (36.45)	1.215 (30.86)			
69	1.735 (44.07)	1.515 (34.48)			
100	2.175 (55.25)	1.800 (45.72)	.450 (11.43)	.960 (24.39)	.657 (16.69)

MICRO-D



Circular 45° Cable Exit



Connector Shown for Reference Only  
(Order Separately)

CABLE EXIT SIZE	W	AVAILABLE ON SIZE
A	.284 (7.21)	09 THRU 100
B	.344 (8.74)	15 THRU 100
C	.384 (9.75)	100 ONLY

SIZE	A MAX	B ±.005 (0.13)	C ±.005 (0.13)	N MAX
09	.785 (19.94)	.565 (14.35)	.340 (8.64)	.865 (21.97)
15	.935 (23.75)	.715 (18.16)		
21	1.085 (27.56)	.865 (21.97)		
25	1.185 (30.10)	.965 (24.51)		
31	1.335 (33.91)	1.115 (28.32)		
37	1.485 (37.72)	1.265 (32.13)		
51	1.435 (36.45)	1.215 (30.86)	.400 (10.16)	.925 (23.50)
69	1.735 (44.07)	1.515 (38.48)		
100	2.175 (55.25)	1.800 (45.72)		

# MICRO-D DUST CAPS

## SERIES MDCE

SUITABLE FOR M83513 CONNECTORS

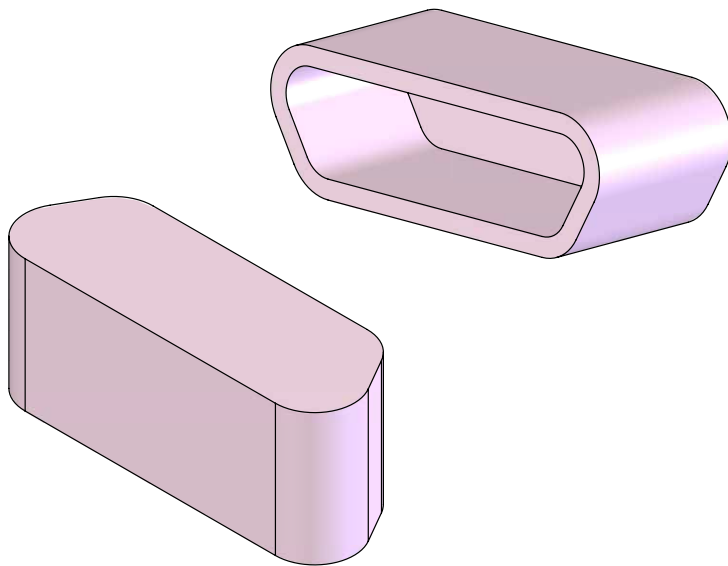
1.	2.	3.
Micro-D Dust Cap	Connector Size (Number of Contacts)	Connector Type
MDCE-	06-	A

1. Connector Series	
<b>MDCE-</b>	Micro-D Dust Cap

2. Connector Size (Number of Contacts)
09-
15-
21-
25-
31-
37-
51-
69-
100-

3. Connector Type	
<b>P</b>	Plug (Pin)
<b>S</b>	Receptacles (Socket)

MICRO-D



MATERIAL: Statically Dissipative

COLOR: Pink/Black

Part Number Chart
MDCE-09-P
MDCE-15-P
MDCE-21-P
MDCE-25-P
MDCE-31-P
MDCE-37-P
MDCE-51-P
MDCE-69-P
MDCE-100-P
MDCE-09-S
MDCE-15-S
MDCE-21-S
MDCE-25-S
MDCE-31-S
MDCE-37-S
MDCE-51-S
MDCE-69-S
MDCE-100-S

## Need A Special Connector?

Amphenol has designed a range of specialty connectors to meet your specific requirements. Our connectors are designed to be compact, robust, and multi-functional. Please contact us for more information.

### COMBO / HYBRID MICRO-D

- Suitable for compact designs
- Coax / Power / Signal contacts
- Metal or plastic shell
- Available sizes 9 thru 100
- Available in various shell finishes
- Wire or PCB termination
- Standard and custom hardware available



### SURFACE MOUNT / STRADDLE MOUNT

- Suitable for limited board space
- Vertical or horizontal mount
- .050" pad spacing
- Metal or plastic shell
- Available sizes 9 thru 37
- Standard and custom hardware available



### HIGH TEMPERATURE MICRO-D (200C)

- Suitable for oil and gas applications
- Metal or plastic shell
- Special high temperature dielectric insulator
- High temp solder
- Available sizes 9 thru 100
- Available in various shell finishes
- Wire gauge range 32 AWG to 24 AWG
- Multiple wire lengths (+1.00 / -0.00)
- Standard and custom hardware available



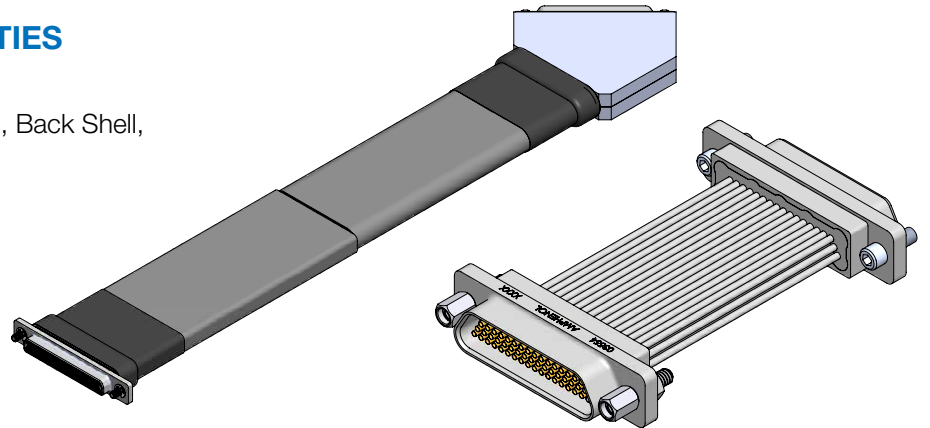
# MICRO-D CABLE-HARNESSED ASSEMBLIES

## Amphenol designs and manufactures the Right Solution for your needs!

Premium service, fast response time ... imagine the possibilities!

### DESIGN CAPABILITIES

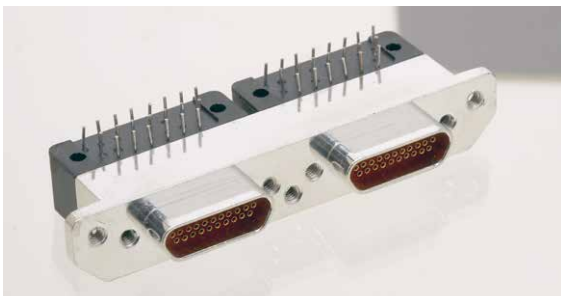
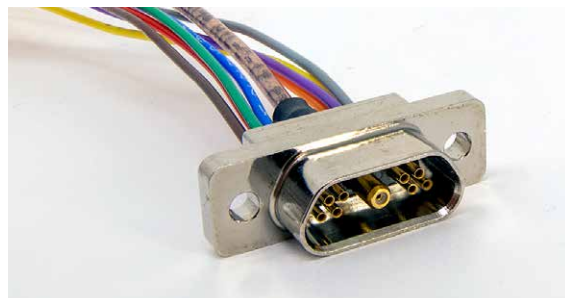
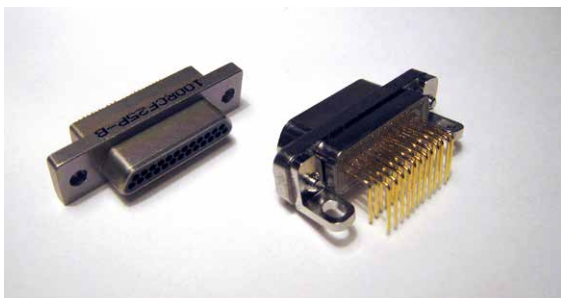
- Specialize in cabling arrangements
- Various cable styles- Over Moulded, Back Shell, Shielded, Twisted Pairs, and PCBs
- Multiple Micro-D to Micro-D
- Micro-D to D-Sub
- Micro-D to D38999
- Micro-D to Flex
- Space grade assemblies
- Micro-D to PCB Termination
- Micro-D to header or other product termination
- Single or multiple cable/wire terminations (Micro-D to Micro-D, twisted pairs available)
- Single or multiple cable/wire terminations (Micro-D to D-sub, Shielded Teflon Cable)



MICRO-D





## DESIGN CAPABILITIES

- Contact arrangements up to 372 positions
- Contact styles - Fiber Optic, Power, Signal, RF
- Mounting styles - SMT, Through Hole, Press Fit, Solder Cup, Blind Mate
- Custom contact lengths for multiple PCB thickness
- Custom connector shell designs available
- Standard and custom hardware available
- Custom surface mount with guide pins and threaded mounting features
- Custom insert pattern (signal & power or coax contacts)
- Custom strip line connector with mounting features
- Double or multiple bay (vertical / horizontal orientation)



# MICRO-D HIGH SPEED PROTOCOL CHART

MICRO-D

HIGH SPEED PROTOCOL	MICRO-D
10Base-T Ethernet 1000Base-T Gigabit Ethernet USB 2.0 SATA 1.0 SATA 2.0	 15 Pin
SATA 3.0	 21 Pin
10GBase-T Gigabit Ethernet USB 3.0	 25 Pin
DVI Display Port 1.0 Display Port 1.2 HDMI	 51 Pin

# MICRO-D WIRE GAUGE CHART

AWG	DIAMETER	
	(INCH)	(MM)
0000 (4/0)	0.46	11.684
000 (3/0)	0.4096	10.404
00 (2/0)	0.3648	9.266
0 (1/0)	0.3249	8.252
1	0.2893	7.348
2	0.2576	6.544
3	0.2294	5.827
4	0.2043	5.189
5	0.1819	4.621
6	0.162	4.115
7	0.1443	3.665
8	0.1285	3.264
9	0.1144	2.906
10	0.1019	2.588
11	0.0907	2.305
12	0.0808	2.053
13	0.072	1.828
14	0.0641	1.628
15	0.0571	1.45
16	0.0508	1.291
17	0.0453	1.15
18	0.0403	1.024
19	0.0359	0.912
20	0.032	0.812
21	0.0285	0.723
22	0.0253	0.644
23	0.0226	0.573
24	0.0201	0.511
25	0.0179	0.455
26	0.0159	0.405
27	0.0142	0.361
28	0.0126	0.321
29	0.0113	0.286
30	0.01	0.255
31	0.00893	0.227
32	0.00795	0.202
33	0.00708	0.18
34	0.0063	0.16
35	0.00561	0.143
36	0.005	0.127
37	0.00445	0.113
38	0.00397	0.101
39	0.00353	0.0897
40	0.00314	0.0799

PIN	Base Colour	1 <sup>st</sup> Stripe	2 <sup>nd</sup> Stripe	3 <sup>rd</sup> Stripe
1	Black	-	-	-
2	Brown	-	-	-
3	Red	-	-	-
4	Orange	-	-	-
5	Yellow	-	-	-
6	Green	-	-	-
7	Blue	-	-	-
8	Violet	-	-	-
9	Grey	-	-	-
10	White	-	-	-
11	White	Black	-	-
12	White	Brown	-	-
13	White	Red	-	-
14	White	Orange	-	-
15	White	Yellow	-	-
16	White	Green	-	-
17	White	Blue	-	-
18	White	Violet	-	-
19	White	Grey	-	-
20	White	Black	Brown	-
21	White	Black	Red	-
22	White	Black	Orange	-
23	White	Black	Yellow	-
24	White	Black	Green	-
25	White	Black	Blue	-
26	White	Black	Violet	-
27	White	Black	Grey	-
28	White	Brown	Red	-
29	White	Brown	Orange	-
30	White	Brown	Yellow	-
31	White	Brown	Green	-
32	White	Brown	Blue	-
33	White	Brown	Violet	-
34	White	Brown	Grey	-
35	White	Red	Orange	-
36	White	Red	Yellow	-
37	White	Red	Green	-
38	White	Red	Blue	-
39	White	Red	Violet	-
40	White	Red	Grey	-
41	White	Orange	Yellow	-
42	White	Orange	Green	-
43	White	Orange	Blue	-
44	White	Orange	Violet	-
45	White	Orange	Grey	-
46	White	Yellow	Green	-
47	White	Yellow	Blue	-
48	White	Yellow	Violet	-
49	White	Yellow	Grey	-
50	White	Green	Blue	-

PIN	Base Colour	1 <sup>st</sup> Stripe	2 <sup>nd</sup> Stripe	3 <sup>rd</sup> Stripe
51	White	Green	Violet	-
52	White	Green	Grey	-
53	White	Blue	Violet	-
54	White	Blue	Grey	-
55	White	Violet	Grey	-
56	White	Black	Brown	Red
57	White	Black	Brown	Orange
58	White	Black	Brown	Yellow
59	White	Black	Brown	Green
60	White	Black	Brown	Blue
61	White	Black	Brown	Violet
62	White	Black	Brown	Grey
63	White	Black	Red	Orange
64	White	Black	Red	Yellow
65	White	Black	Red	Green
66	White	Black	Red	Blue
67	White	Black	Red	Violet
68	White	Black	Red	Grey
69	White	Black	Orange	Yellow
70	White	Black	Orange	Green
71	White	Black	Orange	Blue
72	White	Black	Orange	Violet
73	White	Black	Orange	Grey
74	White	Black	Yellow	Green
75	White	Black	Yellow	Blue
76	White	Black	Yellow	Violet
77	White	Black	Yellow	Grey
78	White	Black	Green	Blue
79	White	Black	Green	Violet
80	White	Black	Green	Grey
81	White	Black	Blue	Violet
82	White	Black	Blue	Grey
83	White	Black	Violet	Grey
84	White	Brown	Red	Orange
85	White	Brown	Red	Yellow
86	White	Brown	Red	Green
87	White	Brown	Red	Blue
88	White	Brown	Red	Violet
89	White	Brown	Red	Grey
90	White	Brown	Orange	Yellow
91	White	Brown	Orange	Green
92	White	Brown	Orange	Blue
93	White	Brown	Orange	Violet
94	White	Brown	Orange	Grey
95	White	Brown	Yellow	Green
96	White	Brown	Yellow	Blue
97	White	Brown	Yellow	Violet
98	White	Brown	Yellow	Grey
99	White	Brown	Green	Blue
100	White	Brown	Green	Violet



# PART NUMBER CROSS REFERENCE

MICRO-D

Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/01-AC	100RC09P-B	M83513/03-A15C	100RN09P-4F1CB	M83513/03-C12N	100RC21P-4F6BB
M83513/01-AN	100RN09P-B	M83513/03-A15N	100RN09P-4F1CB	M83513/03-C13C	100RC21P-4E1CB
M83513/01-BC	100RC15P-B	M83513/03-A16C	100RC09P-4F6CB	M83513/03-C13N	100RN21P-4E1CB
M83513/01-BN	100RN15P-B	M83513/03-A16N	100RN09P-4F6CB	M83513/03-C14C	100RC21P-4E6CB
M83513/01-CC	100RC21P-B	M83513/03-B01C	100RC15P-4E1AB	M83513/03-C14N	100RN21P-4E6CB
M83513/01-CN	100RN21P-B	M83513/03-B01N	100RN15P-4E1AB	M83513/03-C15C	100RC21P-4F1CB
M83513/01-DC	100RC25P-B	M83513/03-B02C	100RC15P-4E1BB	M83513/03-C15N	100RN21P-4F1CB
M83513/01-DN	100RN25P-B	M83513/03-B02N	100RN15P-4E1BB	M83513/03-C16C	100RC21P-4F6CB
M83513/01-EC	100RC31P-B	M83513/03-B03C	100RC15P-4E6AB	M83513/03-C16N	100RN21P-4F6CB
M83513/01-EN	100RN31P-B	M83513/03-B03N	100RN15P-4E6AB	M83513/03-D01C	100RC25P-4E1AB
M83513/01-FC	100RC37P-B	M83513/03-B04C	100RC15P-4E6BB	M83513/03-D01N	100RN25P-4E1AB
M83513/01-FN	100RN37P-B	M83513/03-B04N	100RN15P-4E6BB	M83513/03-D02C	100RC25P-4E1BB
M83513/01-GC	100RC51P-B	M83513/03-B05C	100RC15P-5L4DB	M83513/03-D02N	100RN25P-4E1BB
M83513/01-GN	100RN51P-B	M83513/03-B05N	100RN15P-5L4DB	M83513/03-D03C	100RC25P-4E6AB
M83513/01-HC	100RC100P-B	M83513/03-B06C	100RC15P-5L4EB	M83513/03-D03N	100RN25P-4E6AB
M83513/01-HN	100RN100P-B	M83513/03-B06N	100RN15P-5L4EB	M83513/03-D04C	100RC25P-4E6BB
M83513/02-AC	100RC09S-B	M83513/03-B07C	100RC15P-5L3DB	M83513/03-D04N	100RN25P-4E6BB
M83513/02-AN	100RN09S-B	M83513/03-B07N	100RN15P-5L3DB	M83513/03-D05C	100RC25P-5L4DB
M83513/02-BC	100RC15S-B	M83513/03-B08C	100RC15P-5L3EB	M83513/03-D05N	100RN25P-5L4DB
M83513/02-BN	100RN15S-B	M83513/03-B08N	100RN15P-5L3EB	M83513/03-D06C	100RC25P-5L4EB
M83513/02-CC	100RC21S-B	M83513/03-B09C	100RC15P-4F1AB	M83513/03-D06N	100RN25P-5L4EB
M83513/02-CN	100RN21S-B	M83513/03-B09N	100RN15P-4F1AB	M83513/03-D07C	100RC25P-5L3DB
M83513/02-DC	100RC25S-B	M83513/03-B10C	100RC15P-4F1BB	M83513/03-D07N	100RN25P-5L3DB
M83513/02-DN	100RN25S-B	M83513/03-B10N	100RN15P-4F1BB	M83513/03-D08C	100RC25P-5L3EB
M83513/02-EC	100RC31S-B	M83513/03-B11C	100RC15P-4F6AB	M83513/03-D08N	100RN25P-5L3EB
M83513/02-EN	100RN31S-B	M83513/03-B11N	100RN15P-4F6AB	M83513/03-D09C	100RC25P-4F1AB
M83513/02-FC	100RC37S-B	M83513/03-B12C	100RC15P-4F6BB	M83513/03-D09N	100RN25P-4F1AB
M83513/02-FN	100RN37S-B	M83513/03-B12N	100RC15P-4F6BB	M83513/03-D10C	100RC25P-4F1BB
M83513/02-GC	100RC51S-B	M83513/03-B13C	100RC15P-4E1CB	M83513/03-D10N	100RN25P-4F1BB
M83513/02-GN	100RN51S-B	M83513/03-B13N	100RN15P-4E1CB	M83513/03-D11C	100RC25P-4F6AB
M83513/02-HC	100RC100S-B	M83513/03-B14C	100RC15P-4E6CB	M83513/03-D11N	100RN25P-4F6AB
M83513/02-HN	100RN100S-B	M83513/03-B14N	100RN15P-4E6CB	M83513/03-D12C	100RC25P-4F6BB
M83513/03-A01C	100RC09P-4E1AB	M83513/03-B15C	100RC15P-4F1CB	M83513/03-D12N	100RN25P-4F6BB
M83513/03-A01N	100RN09P-4E1AB	M83513/03-B15N	100RN15P-4F1CB	M83513/03-D13C	100RC25P-4E1CB
M83513/03-A02C	100RC09P-4E1BB	M83513/03-B16C	100RC15P-4F6CB	M83513/03-D13N	100RN25P-4E1CB
M83513/03-A02N	100RN09P-4E1BB	M83513/03-B16N	100RN15P-4F6CB	M83513/03-D14C	100RC25P-4E6CB
M83513/03-A03C	100RC09P-4E6AB	M83513/03-C01C	100RC21P-4E1AB	M83513/03-D14N	100RN25P-4E6CB
M83513/03-A03N	100RN09P-4E6AB	M83513/03-C01N	100RN21P-4E1AB	M83513/03-D15C	100RC25P-4F1CB
M83513/03-A04C	100RC09P-4E6BB	M83513/03-C02C	100RC21P-4E1BB	M83513/03-D15N	100RN25P-4F1CB
M83513/03-A04N	100RN09P-4E6BB	M83513/03-C02N	100RN21P-4E1BB	M83513/03-D16C	100RC25P-4F6CB
M83513/03-A05C	100RC09P-5L4DB	M83513/03-C03C	100RC21P-4E6AB	M83513/03-D16N	100RN25P-4F6CB
M83513/03-A05N	100RN09P-5L4DB	M83513/03-C03N	100RN21P-4E6AB	M83513/03-E01C	100RC31P-4E1AB
M83513/03-A06C	100RC09P-5L4EB	M83513/03-C04C	100RC21P-4E6BB	M83513/03-E01N	100RN31P-4E1AB
M83513/03-A06N	100RN09P-5L4EB	M83513/03-C04N	100RN21P-4E6BB	M83513/03-E02C	100RC31P-4E1BB
M83513/03-A07C	100RC09P-5L3DB	M83513/03-C05C	100RC21P-5L4DB	M83513/03-E02N	100RN31P-4E1BB
M83513/03-A07N	100RN09P-5L3DB	M83513/03-C05N	100RN21P-5L4DB	M83513/03-E03C	100RC31P-4E6AB
M83513/03-A08C	100RC09P-5L3EB	M83513/03-C06C	100RC21P-5L4EB	M83513/03-E03N	100RN31P-4E6AB
M83513/03-A08N	100RN09P-5L3EB	M83513/03-C06N	100RN21P-5L4EB	M83513/03-E04C	100RC31P-4E6BB

# PART NUMBER CROSS REFERENCE

Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/03-A09C	100RC09P-4F1AB	M83513/03-C07C	100RC21P-5L3DB	M83513/03-E04N	100RN31P-4E6BB
M83513/03-A09N	100RN09P-4F1AB	M83513/03-C07N	100RN21P-5L3DB	M83513/03-E05C	100RC31P-5L4DB
M83513/03-A10C	100RC09P-4F1BB	M83513/03-C08C	100RC21P-5L3EB	M83513/03-E05N	100RN31P-5L4DB
M83513/03-A10N	100RN09P-4F1BB	M83513/03-C08N	100RN21P-5L3EB	M83513/03-E06C	100RC31P-5L4EB
M83513/03-A11C	100RC09P-4F6AB	M83513/03-C09C	100RC21P-4F1AB	M83513/03-E06N	100RN31P-5L4EB
M83513/03-A11N	100RN09P-4F6AB	M83513/03-C09N	100RN21P-4F1AB	M83513/03-E07C	100RC31P-5L3DB
M83513/03-A12C	100RC09P-4F6BB	M83513/03-C10C	100RC21P-4F1BB	M83513/03-E07N	100RN31P-5L3DB
M83513/03-A12N	100RN09P-4F6BB	M83513/03-C10N	100RN21P-4F1BB	M83513/03-E08C	100RC31P-5L3EB
M83513/03-A13C	100RC09P-4E1CB	M83513/03-C11C	100RC21P-4F6AB	M83513/03-E08N	100RN31P-5L3EB
M83513/03-A13N	100RN09P-4E1CB	M83513/03-C11N	100RN21P-4F6AB	M83513/03-E09C	100RC31P-4F1AB
M83513/03-A14C	100RC09P-4E6CB	M83513/03-C12C	100RC21P-4F6BB	M83513/03-E09N	100RN31P-4F1AB
M83513/03-E10C	100RC31P-4F1BB	M83513/03-G07N	100RN51P-5L3DB	M83513/04-A05C	100RC09S-5L4DB
M83513/03-E10N	100RN31P-4F1BB	M83513/03-G08C	100RC51P-5L3EB	M83513/04-A05N	100RN09S-5L4DB
M83513/03-E11C	100RC31P-4F6AB	M83513/03-G08N	100RN51P-5L3EB	M83513/04-A06C	100RC09S-5L4EB
M83513/03-E11N	100RN31P-4F6AB	M83513/03-G09C	100RC51P-4F1AB	M83513/04-A06N	100RN09S-5L4EB
M83513/03-E12C	100RC31P-4F6BB	M83513/03-G09N	100RN51P-4F1AB	M83513/04-A07C	100RC09S-5L3DB
M83513/03-E12N	100RC31P-4F6BB	M83513/03-G10C	100RC51P-4F1BB	M83513/04-A07N	100RN09S-5L3DB
M83513/03-E13C	100RC31P-4E1CB	M83513/03-G10N	100RN51P-4F1BB	M83513/04-A08C	100RC09S-5L3EB
M83513/03-E13N	100RN31P-4E1CB	M83513/03-G11C	100RC51P-4F6AB	M83513/04-A08N	100RN09S-5L3EB
M83513/03-E14C	100RC31P-4E6CB	M83513/03-G11N	100RN51P-4F6AB	M83513/04-A09C	100RC09S-4F1AB
M83513/03-E14N	100RN31P-4E6CB	M83513/03-G12C	100RC51P-4F6BB	M83513/04-A09N	100RN09S-4F1AB
M83513/03-E15C	100RC31P-4F1CB	M83513/03-G12N	100RC51P-4F6BB	M83513/04-A10C	100RC09S-4F1BB
M83513/03-E15N	100RN31P-4F1CB	M83513/03-G13C	100RC51P-4E1CB	M83513/04-A10N	100RN09S-4F1BB
M83513/03-E16C	100RC31P-4F6CB	M83513/03-G13N	100RN51P-4E1CB	M83513/04-A11C	100RC09S-4F6AB
M83513/03-E16N	100RN31P-4F6CB	M83513/03-G14C	100RC51P-4E6CB	M83513/04-A11N	100RN09S-4F6AB
M83513/03-F01C	100RC37P-4E1AB	M83513/03-G14N	100RN51P-4E6CB	M83513/04-A12C	100RC09S-4F6BB
M83513/03-F01N	100RN37P-4E1AB	M83513/03-G15C	100RC51P-4F1CB	M83513/04-A12N	100RC09S-4F6BB
M83513/03-F02C	100RC37P-4E1BB	M83513/03-G15N	100RN51P-4F1CB	M83513/04-A13C	100RC09S-4E1CB
M83513/03-F02N	100RN37P-4E1BB	M83513/03-G16C	100RC51P-4F6CB	M83513/04-A13N	100RN09S-4E1CB
M83513/03-F03C	100RC37P-4E6AB	M83513/03-G16N	100RN51P-4F6CB	M83513/04-A14C	100RC09S-4E6CB
M83513/03-F03N	100RN37P-4E6AB	M83513/03-H01C	100RC100P-4E1AB	M83513/04-A14N	100RN09S-4E6CB
M83513/03-F04C	100RC37P-4E6BB	M83513/03-H01N	100RN100P-4E1AB	M83513/04-A15C	100RC09S-4F1CB
M83513/03-F04N	100RN37P-4E6BB	M83513/03-H02C	100RC100P-4E1BB	M83513/04-A15N	100RN09S-4F1CB
M83513/03-F05C	100RC37P-5L4DB	M83513/03-H02N	100RN100P-4E1BB	M83513/04-A16C	100RC09S-4F6CB
M83513/03-F05N	100RN37P-5L4DB	M83513/03-H03C	100RC100P-4E6AB	M83513/04-A16N	100RN09S-4F6CB
M83513/03-F06C	100RC37P-5L4EB	M83513/03-H03N	100RN100P-4E6AB	M83513/04-B01C	100RC15S-4E1AB
M83513/03-F06N	100RN37P-5L4EB	M83513/03-H04C	100RC100P-4E6BB	M83513/04-B01N	100RN15S-4E1AB
M83513/03-F07C	100RC37P-5L3DB	M83513/03-H04N	100RN100P-4E6BB	M83513/04-B02C	100RC15S-4E1BB
M83513/03-F07N	100RN37P-5L3DB	M83513/03-H05C	100RC100P-5L4DB	M83513/04-B02N	100RN15S-4E1BB
M83513/03-F08C	100RC37P-5L3EB	M83513/03-H05N	100RN100P-5L4DB	M83513/04-B03C	100RC15S-4E6AB
M83513/03-F08N	100RN37P-5L3EB	M83513/03-H06C	100RC100P-5L4EB	M83513/04-B03N	100RN15S-4E6AB
M83513/03-F09C	100RC37P-4F1AB	M83513/03-H06N	100RN100P-5L4EB	M83513/04-B04C	100RC15S-4E6BB
M83513/03-F09N	100RN37P-4F1AB	M83513/03-H07C	100RC100P-5L3DB	M83513/04-B04N	100RN15S-4E6BB
M83513/03-F10C	100RC37P-4F1BB	M83513/03-H07N	100RN100P-5L3DB	M83513/04-B05C	100RC15S-5L4DB
M83513/03-F10N	100RN37P-4F1BB	M83513/03-H08C	100RC100P-5L3EB	M83513/04-B05N	100RN15S-5L4DB
M83513/03-F11C	100RC37P-4F6AB	M83513/03-H08N	100RN100P-5L3EB	M83513/04-B06C	100RC15S-5L4EB
M83513/03-F11N	100RN37P-4F6AB	M83513/03-H09C	100RC100P-4F1AB	M83513/04-B06N	100RN15S-5L4EB
M83513/03-F12C	100RC37P-4F6BB	M83513/03-H09N	100RN100P-4F1AB	M83513/04-B07C	100RC15S-5L3DB

# PART NUMBER CROSS REFERENCE

MICRO-D

Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/03-F12N	100RC37P-4F6BB	M83513/03-H10C	100RC100P-4F1BB	M83513/04-B07N	100RN15S-5L3DB
M83513/03-F13C	100RC37P-4E1CB	M83513/03-H10N	100RN100P-4F1BB	M83513/04-B08C	100RC15S-5L3EB
M83513/03-F13N	100RN37P-4E1CB	M83513/03-H11C	100RC100P-4F6AB	M83513/04-B08N	100RN15S-5L3EB
M83513/03-F14C	100RC37P-4E6CB	M83513/03-H11N	100RN100P-4F6AB	M83513/04-B09C	100RC15S-4F1AB
M83513/03-F14N	100RN37P-4E6CB	M83513/03-H12C	100RC100P-4F6BB	M83513/04-B09N	100RN15S-4F1AB
M83513/03-F15C	100RC37P-4F1CB	M83513/03-H12N	100RN100P-4F6BB	M83513/04-B10C	100RC15S-4F1BB
M83513/03-F15N	100RN37P-4F1CB	M83513/03-H13C	100RC100P-4E1CB	M83513/04-B10N	100RN15S-4F1BB
M83513/03-F16C	100RC37P-4F6CB	M83513/03-H13N	100RN100P-4E1CB	M83513/04-B11C	100RC15S-4F6AB
M83513/03-F16N	100RN37P-4F6CB	M83513/03-H14C	100RC100P-4E6CB	M83513/04-B11N	100RN15S-4F6AB
M83513/03-G01C	100RC51P-4E1AB	M83513/03-H14N	100RN100P-4E6CB	M83513/04-B12C	100RC15S-4F6BB
M83513/03-G01N	100RN51P-4E1AB	M83513/03-H15C	100RC100P-4F1CB	M83513/04-B12N	100RC15S-4F6BB
M83513/03-G02C	100RC51P-4E1BB	M83513/03-H15N	100RN100P-4F1CB	M83513/04-B13C	100RC15S-4E1CB
M83513/03-G02N	100RN51P-4E1BB	M83513/03-H16C	100RC100P-4F6CB	M83513/04-B13N	100RN15S-4E1CB
M83513/03-G03C	100RC51P-4E6AB	M83513/03-H16N	100RN100P-4F6CB	M83513/04-B14C	100RC15S-4E6CB
M83513/03-G03N	100RN51P-4E6AB	M83513/04-A01C	100RC09S-4E1AB	M83513/04-B14N	100RN15S-4E6CB
M83513/03-G04C	100RC51P-4E6BB	M83513/04-A01N	100RN09S-4E1AB	M83513/04-B15C	100RC15S-4F1CB
M83513/03-G04N	100RN51P-4E6BB	M83513/04-A02C	100RC09S-4E1BB	M83513/04-B15N	100RN15S-4F1CB
M83513/03-G05C	100RC51P-5L4DB	M83513/04-A02N	100RN09S-4E1BB	M83513/04-B16C	100RC15S-4F6CB
M83513/03-G05N	100RN51P-5L4DB	M83513/04-A03C	100RC09S-4E6AB	M83513/04-B16N	100RN15S-4F6CB
M83513/03-G06C	100RC51P-5L4EB	M83513/04-A03N	100RN09S-4E6AB	M83513/04-C01C	100RC21S-4E1AB
M83513/03-G06N	100RN51P-5L4EB	M83513/04-A04C	100RC09S-4E6BB	M83513/04-C01N	100RN21S-4E1AB
M83513/03-G07C	100RC51P-5L3DB	M83513/04-A04N	100RN09S-4E6BB	M83513/04-C02C	100RC21S-4E1BB
M83513/04-C02N	100RN21S-4E1BB	M83513/04-D16C	100RC25S-4F6CB	M83513/04-F13N	100RN37S-4E1CB
M83513/04-C03C	100RC21S-4E6AB	M83513/04-D16N	100RN25S-4F6CB	M83513/04-F14C	100RC37S-4E6CB
M83513/04-C03N	100RN21S-4E6AB	M83513/04-E01C	100RC31S-4E1AB	M83513/04-F14N	100RN37S-4E6CB
M83513/04-C04C	100RC21S-4E6BB	M83513/04-E01N	100RN31S-4E1AB	M83513/04-F15C	100RC37S-4F1CB
M83513/04-C04N	100RN21S-4E6BB	M83513/04-E02C	100RC31S-4E1BB	M83513/04-F15N	100RN37S-4F1CB
M83513/04-C05C	100RC21S-5L4DB	M83513/04-E02N	100RN31S-4E1BB	M83513/04-F16C	100RC37S-4F6CB
M83513/04-C05N	100RN21S-5L4DB	M83513/04-E03C	100RC31S-4E6AB	M83513/04-F16N	100RN37S-4F6CB
M83513/04-C06C	100RC21S-5L4EB	M83513/04-E03N	100RN31S-4E6AB	M83513/04-G01C	100RC51S-4E1AB
M83513/04-C06N	100RN21S-5L4EB	M83513/04-E04C	100RC31S-4E6BB	M83513/04-G01N	100RN51S-4E1AB
M83513/04-C07C	100RC21S-5L3DB	M83513/04-E04N	100RN31S-4E6BB	M83513/04-G02C	100RC51S-4E1BB
M83513/04-C07N	100RN21S-5L3DB	M83513/04-E05C	100RC31S-5L4DB	M83513/04-G02N	100RN51S-4E1BB
M83513/04-C08C	100RC21S-5L3EB	M83513/04-E05N	100RN31S-5L4DB	M83513/04-G03C	100RC51S-4E6AB
M83513/04-C08N	100RN21S-5L3EB	M83513/04-E06C	100RC31S-5L4EB	M83513/04-G03N	100RN51S-4E6AB
M83513/04-C09C	100RC21S-4F1AB	M83513/04-E06N	100RN31S-5L4EB	M83513/04-G04C	100RC51S-4E6BB
M83513/04-C09N	100RN21S-4F1AB	M83513/04-E07C	100RC31S-5L3DB	M83513/04-G04N	100RN51S-4E6BB
M83513/04-C10C	100RC21S-4F1BB	M83513/04-E07N	100RN31S-5L3DB	M83513/04-G05C	100RC51S-5L4DB
M83513/04-C10N	100RN21S-4F1BB	M83513/04-E08C	100RC31S-5L3EB	M83513/04-G05N	100RN51S-5L4DB
M83513/04-C11C	100RC21S-4F6AB	M83513/04-E08N	100RN31S-5L3EB	M83513/04-G06C	100RC51S-5L4EB
M83513/04-C11N	100RN21S-4F6AB	M83513/04-E09C	100RC31S-4F1AB	M83513/04-G06N	100RN51S-5L4EB
M83513/04-C12C	100RC21S-4F6BB	M83513/04-E09N	100RN31S-4F1AB	M83513/04-G07C	100RC51S-5L3DB
M83513/04-C12N	100RC21S-4F6BB	M83513/04-E10C	100RC31S-4F1BB	M83513/04-G07N	100RN51S-5L3DB
M83513/04-C13C	100RC21S-4E1CB	M83513/04-E10N	100RN31S-4F1BB	M83513/04-G08C	100RC51S-5L3EB
M83513/04-C13N	100RN21S-4E1CB	M83513/04-E11C	100RC31S-4F6AB	M83513/04-G08N	100RN51S-5L3EB
M83513/04-C14C	100RC21S-4E6CB	M83513/04-E11N	100RN31S-4F6AB	M83513/04-G09C	100RC51S-4F1AB
M83513/04-C14N	100RN21S-4E6CB	M83513/04-E12C	100RC31S-4F6BB	M83513/04-G09N	100RN51S-4F1AB
M83513/04-C15C	100RC21S-4F1CB	M83513/04-E12N	100RC31S-4F6BB	M83513/04-G10C	100RC51S-4F1BB

Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/04-C15N	100RN21S-4F1CB	M83513/04-E13C	100RC31S-4E1CB	M83513/04-G10N	100RN51S-4F1BB
M83513/04-C16C	100RC21S-4F6CB	M83513/04-E13N	100RN31S-4E1CB	M83513/04-G11C	100RC51S-4F6AB
M83513/04-C16N	100RN21S-4F6CB	M83513/04-E14C	100RC31S-4E6CB	M83513/04-G11N	100RN51S-4F6AB
M83513/04-D01C	100RC25S-4E1AB	M83513/04-E14N	100RN31S-4E6CB	M83513/04-G12C	100RC51S-4F6BB
M83513/04-D01N	100RN25S-4E1AB	M83513/04-E15C	100RC31S-4F1CB	M83513/04-G12N	100RC51S-4F6BB
M83513/04-D02C	100RC25S-4E1BB	M83513/04-E15N	100RN31S-4F1CB	M83513/04-G13C	100RC51S-4E1CB
M83513/04-D02N	100RN25S-4E1BB	M83513/04-E16C	100RC31S-4F6CB	M83513/04-G13N	100RN51S-4E1CB
M83513/04-D03C	100RC25S-4E6AB	M83513/04-E16N	100RN31S-4F6CB	M83513/04-G14C	100RC51S-4E6CB
M83513/04-D03N	100RN25S-4E6AB	M83513/04-F01C	100RC37S-4E1AB	M83513/04-G14N	100RN51S-4E6CB
M83513/04-D04C	100RC25S-4E6BB	M83513/04-F01N	100RN37S-4E1AB	M83513/04-G15C	100RC51S-4F1CB
M83513/04-D04N	100RN25S-4E6BB	M83513/04-F02C	100RC37S-4E1BB	M83513/04-G15N	100RN51S-4F1CB
M83513/04-D05C	100RC25S-5L4DB	M83513/04-F02N	100RN37S-4E1BB	M83513/04-G16C	100RC51S-4F6CB
M83513/04-D05N	100RN25S-5L4DB	M83513/04-F03C	100RC37S-4E6AB	M83513/04-G16N	100RN51S-4F6CB
M83513/04-D06C	100RC25S-5L4EB	M83513/04-F03N	100RN37S-4E6AB	M83513/04-H01C	100RC100S-4E1AB
M83513/04-D06N	100RN25S-5L4EB	M83513/04-F04C	100RC37S-4E6BB	M83513/04-H01N	100RN100S-4E1AB
M83513/04-D07C	100RC25S-5L3DB	M83513/04-F04N	100RN37S-4E6BB	M83513/04-H02C	100RC100S-4E1BB
M83513/04-D07N	100RN25S-5L3DB	M83513/04-F05C	100RC37S-5L4DB	M83513/04-H02N	100RN100S-4E1BB
M83513/04-D08C	100RC25S-5L3EB	M83513/04-F05N	100RN37S-5L4DB	M83513/04-H03C	100RC100S-4E6AB
M83513/04-D08N	100RN25S-5L3EB	M83513/04-F06C	100RC37S-5L4EB	M83513/04-H03N	100RN100S-4E6AB
M83513/04-D09C	100RC25S-4F1AB	M83513/04-F06N	100RN37S-5L4EB	M83513/04-H04C	100RC100S-4E6BB
M83513/04-D09N	100RN25S-4F1AB	M83513/04-F07C	100RC37S-5L3DB	M83513/04-H04N	100RN100S-4E6BB
M83513/04-D10C	100RC25S-4F1BB	M83513/04-F07N	100RN37S-5L3DB	M83513/04-H05C	100RC100S-5L4DB
M83513/04-D10N	100RN25S-4F1BB	M83513/04-F08C	100RC37S-5L3EB	M83513/04-H05N	100RN100S-5L4DB
M83513/04-D11C	100RC25S-4F6AB	M83513/04-F08N	100RN37S-5L3EB	M83513/04-H06C	100RC100S-5L4EB
M83513/04-D11N	100RN25S-4F6AB	M83513/04-F09C	100RC37S-4F1AB	M83513/04-H06N	100RN100S-5L4EB
M83513/04-D12C	100RC25S-4F6BB	M83513/04-F09N	100RN37S-4F1AB	M83513/04-H07C	100RC100S-5L3DB
M83513/04-D12N	100RC25S-4F6BB	M83513/04-F10C	100RC37S-4F1BB	M83513/04-H07N	100RN100S-5L3DB
M83513/04-D13C	100RC25S-4E1CB	M83513/04-F10N	100RN37S-4F1BB	M83513/04-H08C	100RC100S-5L3EB
M83513/04-D13N	100RN25S-4E1CB	M83513/04-F11C	100RC37S-4F6AB	M83513/04-H08N	100RN100S-5L3EB
M83513/04-D14C	100RC25S-4E6CB	M83513/04-F11N	100RN37S-4F6AB	M83513/04-H09C	100RC100S-4F1AB
M83513/04-D14N	100RN25S-4E6CB	M83513/04-F12C	100RC37S-4F6BB	M83513/04-H09N	100RN100S-4F1AB
M83513/04-D15C	100RC25S-4F1CB	M83513/04-F12N	100RC37S-4F6BB	M83513/04-H10C	100RC100S-4F1BB
M83513/04-D15N	100RN25S-4F1CB	M83513/04-F13C	100RC37S-4E1CB	M83513/04-H10N	100RN100S-4F1BB
M83513/04-H11C	100RC100S-4F6AB	M83513/08-B08	101R15P-5L3EB	M83513/08-F03	101R37P-4E6AB
M83513/04-H11N	100RN100S-4F6AB	M83513/08-B09	101R15P-4F1AB	M83513/08-F04	101R37P-4E6BB
M83513/04-H12C	100RC100S-4F6BB	M83513/08-B10	101R15P-4F1BB	M83513/08-F05	101R37P-5L4DB
M83513/04-H12N	100RC100S-4F6BB	M83513/08-B11	101R15P-4F6AB	M83513/08-F06	101R37P-5L4EB
M83513/04-H13C	100RC100S-4E1CB	M83513/08-B12	101R15P-4F6BB	M83513/08-F07	101R37P-5L3DB
M83513/04-H13N	100RN100S-4E1CB	M83513/08-B13	101R15P-4E1CB	M83513/08-F08	101R37P-5L3EB
M83513/04-H14C	100RC100S-4E6CB	M83513/08-B14	101R15P-4E6CB	M83513/08-F09	101R37P-4F1AB
M83513/04-H14N	100RN100S-4E6CB	M83513/08-B15	101R15P-4F1CB	M83513/08-F10	101R37P-4F1BB
M83513/04-H15C	100RC100S-4F1CB	M83513/08-B16	101R15P-4F6CB	M83513/08-F11	101R37P-4F6AB
M83513/04-H15N	100RN100S-4F1CB	M83513/08-C01	101R21P-4E1AB	M83513/08-F12	101R37P-4F6BB
M83513/04-H16C	100RC100S-4F6CB	M83513/08-C02	101R21P-4E1BB	M83513/08-F13	101R37P-4E1CB
M83513/04-H16N	100RN100S-4F6CB	M83513/08-C03	101R21P-4E6AB	M83513/08-F14	101R37P-4E6CB
M83513/05-02	HM05-02	M83513/08-C04	101R21P-4E6BB	M83513/08-F15	101R37P-4F1CB
M83513/05-03	HM05-03	M83513/08-C05	101R21P-5L4DB	M83513/08-F16	101R37P-4F6CB

# PART NUMBER CROSS REFERENCE

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Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/05-05	HM05-05	M83513/08-C06	101R21P-5L4EB	M83513/08-G01	101R51P-4E1AB
M83513/05-06	HM05-06	M83513/08-C07	101R21P-5L3DB	M83513/08-G02	101R51P-4E1BB
M83513/05-07	HM05-07	M83513/08-C08	101R21P-5L3EB	M83513/08-G03	101R51P-4E6AB
M83513/05-12	HM05-12	M83513/08-C09	101R21P-4F1AB	M83513/08-G04	101R51P-4E6BB
M83513/05-13	HM05-13	M83513/08-C10	101R21P-4F1BB	M83513/08-G05	101R51P-5L4DB
M83513/05-15	HM05-15	M83513/08-C11	101R21P-4F6AB	M83513/08-G06	101R51P-5L4EB
M83513/05-16	HM05-16	M83513/08-C12	101R21P-4F6BB	M83513/08-G07	101R51P-5L3DB
M83513/05-17	HM05-17	M83513/08-C13	101R21P-4E1CB	M83513/08-G08	101R51P-5L3EB
M83513/06-A	101R09P-B	M83513/08-C14	101R21P-4E6CB	M83513/08-G09	101R51P-4F1AB
M83513/06-B	101R15P-B	M83513/08-C15	101R21P-4F1CB	M83513/08-G10	101R51P-4F1BB
M83513/06-C	101R21P-B	M83513/08-C16	101R21P-4F6CB	M83513/08-G11	101R51P-4F6AB
M83513/06-D	101R25P-B	M83513/08-D01	101R25P-4E1AB	M83513/08-G12	101R51P-4F6BB
M83513/06-E	101R31P-B	M83513/08-D02	101R25P-4E1BB	M83513/08-G13	101R51P-4E1CB
M83513/06-F	101R37P-B	M83513/08-D03	101R25P-4E6AB	M83513/08-G14	101R51P-4E6CB
M83513/06-G	101R51P-B	M83513/08-D04	101R25P-4E6BB	M83513/08-G15	101R51P-4F1CB
M83513/07-A	101R09S-B	M83513/08-D05	101R25P-5L4DB	M83513/08-G16	101R51P-4F6CB
M83513/07-B	101R15S-B	M83513/08-D06	101R25P-5L4EB	M83513/09-A01	101R09S-4E1AB
M83513/07-C	101R21S-B	M83513/08-D07	101R25P-5L3DB	M83513/09-A02	101R09S-4E1BB
M83513/07-D	101R25S-B	M83513/08-D08	101R25P-5L3EB	M83513/09-A03	101R09S-4E6AB
M83513/07-E	101R31S-B	M83513/08-D09	101R25P-4F1AB	M83513/09-A04	101R09S-4E6BB
M83513/07-F	101R37S-B	M83513/08-D10	101R25P-4F1BB	M83513/09-A05	101R09S-5L4DB
M83513/07-G	101R51S-B	M83513/08-D11	101R25P-4F6AB	M83513/09-A06	101R09S-5L4EB
M83513/08-A01	101R09P-4E1AB	M83513/08-D12	101R25P-4F6BB	M83513/09-A07	101R09S-5L3DB
M83513/08-A02	101R09P-4E1BB	M83513/08-D13	101R25P-4E1CB	M83513/09-A08	101R09S-5L3EB
M83513/08-A03	101R09P-4E6AB	M83513/08-D14	101R25P-4E6CB	M83513/09-A09	101R09S-4F1AB
M83513/08-A04	101R09P-4E6BB	M83513/08-D15	101R25P-4F1CB	M83513/09-A10	101R09S-4F1BB
M83513/08-A05	101R09P-5L4DB	M83513/08-D16	101R25P-4F6CB	M83513/09-A11	101R09S-4E6AB
M83513/08-A06	101R09P-5L4EB	M83513/08-E01	101R31P-4E1AB	M83513/09-A12	101R09S-4F6BB
M83513/08-A07	101R09P-5L3DB	M83513/08-E02	101R31P-4E1BB	M83513/09-A13	101R09S-4E1CB
M83513/08-A08	101R09P-5L3EB	M83513/08-E03	101R31P-4E6AB	M83513/09-A14	101R09S-4E6CB
M83513/08-A09	101R09P-4F1AB	M83513/08-E04	101R31P-4E6BB	M83513/09-A15	101R09S-4F1CB
M83513/08-A10	101R09P-4F1BB	M83513/08-E05	101R31P-5L4DB	M83513/09-B01	101R15S-4E1AB
M83513/08-A11	101R09P-4F6AB	M83513/08-E06	101R31P-5L4EB	M83513/09-B02	101R15S-4E1BB
M83513/08-A12	101R09P-4F6BB	M83513/08-E07	101R31P-5L3DB	M83513/09-B03	101R15S-4E6AB
M83513/08-A13	101R09P-4E1CB	M83513/08-E08	101R31P-5L3EB	M83513/09-B04	101R15S-4E6BB
M83513/08-A14	101R09P-4E6CB	M83513/08-E09	101R31P-4F1AB	M83513/09-B05	101R15S-5L4DB
M83513/08-A15	101R09P-4F1CB	M83513/08-E10	101R31P-4F1BB	M83513/09-B06	101R15S-5L4EB
M83513/08-A16	101R09P-4F6CB	M83513/08-E11	101R31P-4F6AB	M83513/09-B07	101R15S-5L3DB
M83513/08-B01	101R15P-4E1AB	M83513/08-E12	101R31P-4F6BB	M83513/09-B08	101R15S-5L3EB
M83513/08-B02	101R15P-4E1BB	M83513/08-E13	101R31P-4E1CB	M83513/09-B09	101R15S-4F1AB
M83513/08-B03	101R15P-4E6AB	M83513/08-E14	101R31P-4E6CB	M83513/09-B10	101R15S-4F1BB
M83513/08-B04	101R15P-4E6BB	M83513/08-E15	101R31P-4F1CB	M83513/09-B11	101R15S-4E6AB
M83513/08-B05	101R15P-5L4DB	M83513/08-E16	101R31P-4F6CB	M83513/09-B12	101R15S-4F6BB
M83513/08-B06	101R15P-5L4EB	M83513/08-F01	101R37P-4E1AB	M83513/09-B13	101R15S-4E1CB
M83513/08-B07	101R15P-5L3DB	M83513/08-F02	101R37P-4E1BB	M83513/09-B14	101R15S-4E6CB
M83513/09-B15	101R15S-4F1CB	M83513/09-F14	101R37S-4E6CB	M83513/10-D02CP	100RC25P-CBRP2
M83513/09-C01	101R21S-4E1AB	M83513/09-F15	101R37S-4F1CB	M83513/10-D02NN	100RN25P-CBR2



Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/09-C02	101R21S-4E1BB	M83513/09-G01	101R51S-4E1AB	M83513/10-D02NP	100RN25P-CBRP2
M83513/09-C03	101R21S-4E6AB	M83513/09-G02	101R51S-4E1BB	M83513/10-D03CN	100RC25P-CBR3
M83513/09-C04	101R21S-4E6BB	M83513/09-G03	101R51S-4E6AB	M83513/10-D03CP	100RC25P-CBRP3
M83513/09-C05	101R21S-5L4DB	M83513/09-G04	101R51S-4E6BB	M83513/10-D03NN	100RN25P-CBR3
M83513/09-C06	101R21S-5L4EB	M83513/09-G05	101R51S-5L4DB	M83513/10-D03NP	100RN25P-CBRP3
M83513/09-C07	101R21S-5L3DB	M83513/09-G06	101R51S-5L4EB	M83513/10-E01CN	100RC31P-CBR1
M83513/09-C08	101R21S-5L3EB	M83513/09-G07	101R51S-5L3DB	M83513/10-E01CP	100RC31P-CBRP1
M83513/09-C09	101R21S-4F1AB	M83513/09-G08	101R51S-5L3EB	M83513/10-E01NN	100RN31P-CBR1
M83513/09-C10	101R21S-4F1BB	M83513/09-G09	101R51S-4F1AB	M83513/10-E01NP	100RN31P-CBRP1
M83513/09-C11	101R21S-4E6AB	M83513/09-G10	101R51S-4F1BB	M83513/10-E02CN	100RC31P-CBR2
M83513/09-C12	101R21S-4F6BB	M83513/09-G11	101R51S-4E6AB	M83513/10-E02CP	100RC31P-CBRP2
M83513/09-C13	101R21S-4E1CB	M83513/09-G12	101R51S-4F6BB	M83513/10-E02NN	100RN31P-CBR2
M83513/09-C14	101R21S-4E6CB	M83513/09-G13	101R51S-4E1CB	M83513/10-E02NP	100RN31P-CBRP2
M83513/09-C15	101R21S-4F1CB	M83513/09-G14	101R51S-4E6CB	M83513/10-E03CN	100RC31P-CBR3
M83513/09-D01	101R25S-4E1AB	M83513/09-G15	101R51S-4F1CB	M83513/10-E03CP	100RC31P-CBRP3
M83513/09-D02	101R25S-4E1BB	M83513/10-A01CN	100RC09P-CBR1	M83513/10-E03NN	100RN31P-CBR3
M83513/09-D03	101R25S-4E6AB	M83513/10-A01CP	100RC09P-CBRP1	M83513/10-E03NP	100RN31P-CBRP3
M83513/09-D04	101R25S-4E6BB	M83513/10-A01NN	100RN09P-CBR1	M83513/10-F01CN	100RC37P-CBR1
M83513/09-D05	101R25S-5L4DB	M83513/10-A01NP	100RN09P-CBRP1	M83513/10-F01CP	100RC37P-CBRP1
M83513/09-D06	101R25S-5L4EB	M83513/10-A02CN	100RC09P-CBR2	M83513/10-F01NN	100RN37P-CBR1
M83513/09-D07	101R25S-5L3DB	M83513/10-A02CP	100RC09P-CBRP2	M83513/10-F01NP	100RN37P-CBRP1
M83513/09-D08	101R25S-5L3EB	M83513/10-A02NN	100RN09P-CBR2	M83513/10-F02CN	100RC37P-CBR2
M83513/09-D09	101R25S-4F1AB	M83513/10-A02NP	100RN09P-CBRP2	M83513/10-F02CP	100RC37P-CBRP2
M83513/09-D10	101R25S-4F1BB	M83513/10-A03CN	100RC09P-CBR3	M83513/10-F02NN	100RN37P-CBR2
M83513/09-D11	101R25S-4E6AB	M83513/10-A03CP	100RC09P-CBRP3	M83513/10-F02NP	100RN37P-CBRP2
M83513/09-D12	101R25S-4F6BB	M83513/10-A03NN	100RN09P-CBR3	M83513/10-F03CN	100RC37P-CBR3
M83513/09-D13	101R25S-4E1CB	M83513/10-A03NP	100RN09P-CBRP3	M83513/10-F03CP	100RC37P-CBRP3
M83513/09-D14	101R25S-4E6CB	M83513/10-B01CN	100RC15P-CBR1	M83513/10-F03NN	100RN37P-CBR3
M83513/09-D15	101R25S-4F1CB	M83513/10-B01CP	100RC15P-CBRP1	M83513/10-F03NP	100RN37P-CBRP3
M83513/09-E01	101R31S-4E1AB	M83513/10-B01NN	100RN15P-CBR1	M83513/11-G01CN	100RC51P-CBR1
M83513/09-E02	101R31S-4E1BB	M83513/10-B01NP	100RN15P-CBRP1	M83513/11-G01CP	100RC51P-CBRP1
M83513/09-E03	101R31S-4E6AB	M83513/10-B02CN	100RC15P-CBR2	M83513/11-G01NN	100RN51P-CBR1
M83513/09-E04	101R31S-4E6BB	M83513/10-B02CT	100RC15P-CBRT2	M83513/11-G01NP	100RN51P-CBRP1
M83513/09-E05	101R31S-5L4DB	M83513/10-B02CP	100RC15P-CBRP2	M83513/11-G02CN	100RC51P-CBR2
M83513/09-E06	101R31S-5L4EB	M83513/10-B02NN	100RN15P-CBR2	M83513/11-G02CP	100RC51P-CBRP2
M83513/09-E07	101R31S-5L3DB	M83513/10-B02NP	100RN15P-CBRP2	M83513/11-G02NN	100RN51P-CBR2
M83513/09-E08	101R31S-5L3EB	M83513/10-B03CN	100RC15P-CBR3	M83513/11-G02NP	100RN51P-CBRP2
M83513/09-E09	101R31S-4F1AB	M83513/10-B03CP	100RC15P-CBRP3	M83513/11-G03CN	100RC51P-CBR3
M83513/09-E10	101R31S-4F1BB	M83513/10-B03NN	100RN15P-CBR3	M83513/11-G03CP	100RC51P-CBRP3
M83513/09-E11	101R31S-4E6AB	M83513/10-B03NP	100RN15P-CBRP3	M83513/11-G03NN	100RN51P-CBR3
M83513/09-E12	101R31S-4F6BB	M83513/10-C01CN	100RC21P-CBR1	M83513/11-G03NP	100RN51P-CBRP3
M83513/09-E13	101R31S-4E1CB	M83513/10-C01CP	100RC21P-CBRP1	M83513/12-H01CN	100RC100P-CBR1
M83513/09-E14	101R31S-4E6CB	M83513/10-C01NN	100RN21P-CBR1	M83513/12-H01CP	100RC100P-CBRP1
M83513/09-E15	101R31S-4F1CB	M83513/10-C01NP	100RN21P-CBRP1	M83513/12-H01NN	100RN100P-CBR1
M83513/09-F01	101R37S-4E1AB	M83513/10-C02CN	100RC21P-CBR2	M83513/12-H01NP	100RN100P-CBRP1
M83513/09-F02	101R37S-4E1BB	M83513/10-C02CP	100RC21P-CBRP2	M83513/12-H02CN	100RC100P-CBR2
M83513/09-F03	101R37S-4E6AB	M83513/10-C02NN	100RN21P-CBR2	M83513/12-H02CP	100RC100P-CBRP2

# PART NUMBER CROSS REFERENCE

MICRO-D

Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/09-F04	101R37S-4E6BB	M83513/10-C02NP	100RN21P-CBRP2	M83513/12-H02NN	100RN100P-CBR2
M83513/09-F05	101R37S-5L4DB	M83513/10-C03CN	100RC21P-CBR3	M83513/12-H02NP	100RN100P-CBRP2
M83513/09-F06	101R37S-5L4EB	M83513/10-C03CP	100RC21P-CBRP3	M83513/12-H03CN	100RC100P-CBR3
M83513/09-F07	101R37S-5L3DB	M83513/10-C03NN	100RN21P-CBR3	M83513/12-H03CP	100RC100P-CBRP3
M83513/09-F08	101R37S-5L3EB	M83513/10-C03NP	100RN21P-CBRP3	M83513/12-H03NN	100RN100P-CBR3
M83513/09-F09	101R37S-4F1AB	M83513/10-D01CN	100RC25P-CBR1	M83513/12-H03NP	100RN100P-CBRP3
M83513/09-F10	101R37S-4F1BB	M83513/10-D01CP	100RC25P-CBRP1	M83513/13-A01CN	100RC09S-CBR1
M83513/09-F11	101R37S-4E6AB	M83513/10-D01NN	100RN25P-CBR1	M83513/13-A01CP	100RC09S-CBRP1
M83513/09-F12	101R37S-4F6BB	M83513/10-D01NP	100RN25P-CBRP1	M83513/13-A01NN	100RN09S-CBR1
M83513/09-F13	101R37S-4E1CB	M83513/10-D02CN	100RC25P-CBR2	M83513/13-A01NP	100RN09S-CBRP1
M83513/13-A02CN	100RC09S-CBR2	M83513/13-F01NN	100RN37SCBR1	M83513/16-C01CP	100RC21PBRP1
M83513/13-A02CP	100RC09S-CBRP2	M83513/13-F01NP	100RN37SCBRP1	M83513/16-C01NN	100RN21PCBR1
M83513/13-A02NN	100RN09S-CBR2	M83513/13-F02CN	100RC37SCBR2	M83513/16-C01NP	100RN21PBRP1
M83513/13-A02NP	100RN09S-CBRP2	M83513/13-F02CP	100RC37SCBRP2	M83513/16-C02CN	100RC21PBR2
M83513/13-A03CN	100RC09S-CBR3	M83513/13-F02NN	100RN37SCBR2	M83513/16-C02CP	100RC21PBRP2
M83513/13-A03CP	100RC09S-CBRP3	M83513/13-F02NP	100RN37SCBRP2	M83513/16-C02NN	100RN21PBR2
M83513/13-A03NN	100RN09S-CBR3	M83513/13-F03CN	100RC37SCBR3	M83513/16-C02NP	100RN21PBRP2
M83513/13-A03NP	100RN09S-CBRP3	M83513/13-F03CP	100RC37SCBRP3	M83513/16-C03CN	100RC21PBR3
M83513/13-B01CN	100RC15S-CBR1	M83513/13-F03NN	100RN37SCBR3	M83513/16-C03CP	100RC21PBRP3
M83513/13-B01CP	100RC15S-CBRP1	M83513/13-F03NP	100RN37SCBRP3	M83513/16-C03NN	100RN21PBR3
M83513/13-B01NN	100RN15S-CBR1	M83513/14-G01CN	100RC51SCBR1	M83513/16-C03NP	100RN21PBRP3
M83513/13-B01NP	100RN15S-CBRP1	M83513/14-G01CP	100RC51SCBRP1	M83513/16-D01CN	100RC25PBR1
M83513/13-B02CN	100RC15S-CBR2	M83513/14-G01NN	100RN51SCBR1	M83513/16-D01CP	100RC25PBRP1
M83513/13-B02CP	100RC15S-CBRP2	M83513/14-G01NP	100RN51SCBRP1	M83513/16-D01NN	100RN25PBR1
M83513/13-B02CT	100RC15S-CBRT2	M83513/14-G02CN	100RC51SCBR2	M83513/16-D01NP	100RN25PBRP1
M83513/13-B02NN	100RN15S-CBR2	M83513/14-G02CP	100RC51SCBRP2	M83513/16-D02CN	100RC25PBR2
M83513/13-B02NP	100RN15S-CBRP2	M83513/14-G02NN	100RN51SCBR2	M83513/16-D02CP	100RC25PBRP2
M83513/13-B03CN	100RC15S-CBR3	M83513/14-G02NP	100RN51SCBRP2	M83513/16-D02NN	100RN25PBR2
M83513/13-B03CP	100RC15S-CBRP3	M83513/14-G03CN	100RC51SCBR3	M83513/16-D02NP	100RN25PBRP2
M83513/13-B03NN	100RN15S-CBR3	M83513/14-G03CP	100RC51SCBRP3	M83513/16-D03CN	100RC25PBR3
M83513/13-B03NP	100RN15S-CBRP3	M83513/14-G03NN	100RN51SCBR3	M83513/16-D03CP	100RC25PBRP3
M83513/13-C01CN	100RC21S-CBR1	M83513/14-G03NP	100RN51SCBRP3	M83513/16-D03NN	100RN25PBR3
M83513/13-C01CP	100RC21S-CBRP1	M83513/15-H01CN	100RC100SCBR1	M83513/16-D03NP	100RN25PBRP31
M83513/13-C01NN	100RN21S-CBR1	M83513/15-H01CP	100RC100SCBRP1	M83513/16-E01CN	100RC31PBR1
M83513/13-C01NP	100RN21S-CBRP1	M83513/15-H01NN	100RN100SCBR1	M83513/16-E01CP	100RC31PBRP1
M83513/13-C02CN	100RC21S-CBR2	M83513/15-H01NP	100RN100SCBRP1	M83513/16-E01NN	100RN31PBR1
M83513/13-C02CP	100RC21S-CBRP2	M83513/15-H02CN	100RC100SCBR2	M83513/16-E01NP	100RN31PBRP1
M83513/13-C02NN	100RN21S-CBR2	M83513/15-H02CP	100RC100SCBRP2	M83513/16-E02CN	100RC31PBR2
M83513/13-C02NP	100RN21S-CBRP2	M83513/15-H02NN	100RN100SCBR2	M83513/16-E02CP	100RC31PBRP2
M83513/13-C03CN	100RC21S-CBR3	M83513/15-H02NP	100RN100SCBRP2	M83513/16-E02NN	100RN31PBR2
M83513/13-C03CP	100RC21S-CBRP3	M83513/15-H03CN	100RC100SCBR3	M83513/16-E02NP	100RN31PBRP2
M83513/13-C03NN	100RN21S-CBR3	M83513/15-H03CP	100RC100SCBRP3	M83513/16-E03CN	100RC31PBR3
M83513/13-C03NP	100RN21S-CBRP3	M83513/15-H03NN	100RN100SCBR3	M83513/16-E03CP	100RC31PBRP3
M83513/13-D01CN	100RC25SCBR1	M83513/15-H03NP	100RN100SCBRP3	M83513/16-E03NN	100RN31PBR3
M83513/13-D01CP	100RC25SCBRP1	M83513/16-A01CN	100RC09SBR1	M83513/16-E03NP	100RN31PBRP3
M83513/13-D01NN	100RN25SCBR1	M83513/16-A01CP	100RC09PBRP1	M83513/16-F01CN	100RC37PBR1
M83513/13-D01NP	100RN25SCBRP1	M83513/16-A01NN	100RN09PBR1	M83513/16-F01CP	100RC37PBRP1



Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/13-D02CN	100RC25SCBR2	M83513/16-A01NP	100RN09PBRP1	M83513/16-F01NN	100RN37PBR1
M83513/13-D02CP	100RC25SCBRP2	M83513/16-A02CN	100RC09PBR2	M83513/16-F01NP	100RN37PBRP1
M83513/13-D02NN	100RN25SCBR2	M83513/16-A02CP	100RC09PBRP2	M83513/16-F02CN	100RC37PBR2
M83513/13-D02NP	100RN25SCBRP2	M83513/16-A02NN	100RN09PBR2	M83513/16-F02CP	100RC37PBRP2
M83513/13-D03CN	100RC25SCBR3	M83513/16-A02NP	100RN09PBRP2	M83513/16-F02NN	100RN37PBR2
M83513/13-D03CP	100RC25SCBRP3	M83513/16-A03CN	100RC09PBR3	M83513/16-F02NP	100RN37PBRP2
M83513/13-D03NN	100RN25SCBR3	M83513/16-A03CP	100RC09PBRP3	M83513/16-F03CN	100RC37PBR3
M83513/13-D03NP	100RN25SCBRP3	M83513/16-A03NN	100RN09PBR3	M83513/16-F03CP	100RC37PBRP3
M83513/13-E01CN	100RC31SCBR1	M83513/16-A03NP	100RN09PBRP3	M83513/16-F03NN	100RN37PBR3
M83513/13-E01CP	100RC31SCBRP1	M83513/16-B01CN	100RC15PBR1	M83513/16-F03NP	100RN37PBRP3
M83513/13-E01NN	100RN31SCBR1	M83513/16-B01CP	100RC15PBRP1	M83513/17-G01CN	100RC51PBR1
M83513/13-E01NP	100RN31SCBRP1	M83513/16-B01NN	100RN15PBR1	M83513/17-G01CP	100RC51PBRP1
M83513/13-E02CN	100RC31SCBR2	M83513/16-B01NP	100RN15PBRP1	M83513/17-G01NN	100RN51PBR1
M83513/13-E02CP	100RC31SCBRP2	M83513/16-B02CN	100RC15PBR2	M83513/17-G01NP	100RN51PBRP1
M83513/13-E02NN	100RN31SCBR2	M83513/16-B02CP	100RC15PBRP2	M83513/17-G02CN	100RC51PBR2
M83513/13-E02NP	100RN31SCBRP2	M83513/16-B02NN	100RN15PBR2	M83513/17-G02CP	100RC51PBRP2
M83513/13-E03CN	100RC31SCBR3	M83513/16-B02NP	100RN15PBRP2	M83513/17-G02NN	100RN51PBR2
M83513/13-E03CP	100RC31SCBRP3	M83513/16-B03CN	100RC15PBR3	M83513/17-G02NP	100RN51PBRP2
M83513/13-E03NN	100RN31SCBR3	M83513/16-B03CP	100RC15PBRP3	M83513/17-G03CN	100RC51PBR3
M83513/13-E03NP	100RN31SCBRP3	M83513/16-B03NN	100RN15PBR3	M83513/17-G03CP	100RC51PBRP3
M83513/13-F01CN	100RC37SCBR1	M83513/16-B03NP	100RN15PBRP3	M83513/17-G03NN	100RN51PBR3
M83513/13-F01CP	100RC37SCBRP1	M83513/16-C01CN	100RC21PBR1	M83513/17-G03NP	100RN51PBRP3
M83513/18-H01CN	100RC100PBR1	M83513/19-D03NP	100RN25SBRP3	M83513/22-A03NN	100RN09PBS3
M83513/18-H01CP	100RC100PBRP1	M83513/19-E01CN	100RC31SBR1	M83513/22-A03NP	100RN09PBSP3
M83513/18-H01NN	100RN100PBR1	M83513/19-E01CP	100RC31SBRP1	M83513/22-B01CN	100RC15PBS1
M83513/18-H01NP	100RN100PBRP1	M83513/19-E01NN	100RN31SBR1	M83513/22-B01CP	100RC15PBSP1
M83513/18-H02CN	100RC100PBR2	M83513/19-E01NP	100RN31SBRP1	M83513/22-B01NN	100RN15PBS1
M83513/18-H02CP	100RC100PBRP2	M83513/19-E02CN	100RC31SBR2	M83513/22-B01NP	100RN15PBSP1
M83513/18-H02NN	100RN100PBR2	M83513/19-E02CP	100RC31SBRP2	M83513/22-B02CN	100RC15PBS2
M83513/18-H02NP	100RN100PBRP2	M83513/19-E02NN	100RN31SBR2	M83513/22-B02CP	100RC15PBSP2
M83513/18-H03CN	100RC100PBR3	M83513/19-E02NP	100RN31SBRP2	M83513/22-B02NN	100RN15PBS2
M83513/18-H03CP	100RC100PBRP3	M83513/19-E03CN	100RC31SBR3	M83513/22-B02NP	100RN15PBSP2
M83513/18-H03NN	100RN100PBR3	M83513/19-E03CP	100RC31SBRP3	M83513/22-B01CT	100RC15P-BST1
M83513/18-H03NP	100RN100PBRP3	M83513/19-E03NN	100RN31SBR3	M83513/22-B03CN	100RC15PBS3
M83513/19-A01CN	100RN09SBRP1	M83513/19-E03NP	100RN31SBRP3	M83513/22-B03CP	100RC15PBSP3
M83513/19-A01CP	100RC09SBRP1	M83513/19-F01CN	100RC37SBR1	M83513/22-B03NN	100RN15PBS3
M83513/19-A01NN	100RN09SBR1	M83513/19-F01CP	100RC37SBRP1	M83513/22-B03NP	100RN15PBSP3
M83513/19-A01NP	100RN09SBRP1	M83513/19-F01NN	100RN37SBR1	M83513/22-C01CN	100RC21PBS1
M83513/19-A02CN	100RC09SBR2	M83513/19-F01NP	100RN37SBRP1	M83513/22-C01CP	100RC21PBSP
M83513/19-A02CP	100RC09SBRP2	M83513/19-F02CN	100RC37SBR2	M83513/22-C01NN	100RN21PBS1
M83513/19-A02NN	100RN09SBR2	M83513/19-F02CP	100RC37SBRP2	M83513/22-C01NP	100RN21PBSP1
M83513/19-A02NP	100RN09SBRP2	M83513/19-F02NN	100RN37SBR2	M83513/22-C02CN	100RC21PBS2
M83513/19-A03CN	100RC09SBR3	M83513/19-F02NP	100RN37SBRP2	M83513/22-C02CP	100RC21PBSP2
M83513/19-A03CP	100RC09SBRP3	M83513/19-F03CN	100RC37SBR3	M83513/22-C02NN	100RN21PBS2
M83513/19-A03NN	100RN09SBR3	M83513/19-F03CP	100RC37SBRP3	M83513/22-C02NP	100RN21PBSP2
M83513/19-A03NP	100RN09SBRP3	M83513/19-F03NN	100RN37SBR3	M83513/22-C03CN	100RC21PBS3
M83513/19-B01CN	100RC15SBR1	M83513/19-F03NP	100RN37SBRP3	M83513/22-C03CP	100RC21PBSP3

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Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/19-B01CP	100RC15SBRP1	M83513/20-G01CN	100RC51SBR1	M83513/22-C03NN	100RN21PBS3
M83513/19-B01NN	100RN15SBR1	M83513/20-G01CP	100RC51SBRP1	M83513/22-C03NP	100RN21PBSP3
M83513/19-B01NP	100RN15SBRP1	M83513/20-G01NN	100RN51SBR1	M83513/22-D01CN	100RC25PBS1
M83513/19-B02CN	100RC15SBR2	M83513/20-G01NP	100RN51SBRP1	M83513/22-D01CP	100RC25PBSP1
M83513/19-B02CP	100RC15SBRP2	M83513/20-G02CN	100RC51SBR2	M83513/22-D01NN	100RN25PBS1
M83513/19-B02NN	100RN15SBR2	M83513/20-G02CP	100RC51SBRP2	M83513/22-D01NP	100RN25PBSP1
M83513/19-B02NP	100RN15SBRP2	M83513/20-G02NN	100RN51SBR2	M83513/22-D02CN	100RC25PBS2
M83513/19-B03CN	100RC15SBR3	M83513/20-G02NP	100RN51SBRP2	M83513/22-D02CP	100RC25PBSP2
M83513/19-B03CP	100RC15SBRP3	M83513/20-G03CN	100RC51SBR3	M83513/22-D02NN	100RN25PBS2
M83513/19-B03NN	100RN15SBR3	M83513/20-G03CP	100RC51SBRP3	M83513/22-D02NP	100RN25PBSP2
M83513/19-B03NP	100RN15SBRP3	M83513/20-G03NN	100RN51SBR3	M83513/22-D03CN	100RC25PBS3
M83513/19-C01CN	100RC21SBR1	M83513/20-G03NP	100RN51SBRP3	M83513/22-D03CP	100RC25PBSP3
M83513/19-C01CP	100RC21SBRP1	M83513/21-H01CN	100RC100SBR1	M83513/22-D03NN	100RN25PBS3
M83513/19-C01NN	100RN21SBR1	M83513/21-H01CP	100RC100SBRP1	M83513/22-D03NP	100RN25PBSP3
M83513/19-C01NP	100RN21SBRP1	M83513/21-H01NN	100RN100SBR1	M83513/22-E01CN	100RC31PBS1
M83513/19-C02CN	100RC21SBR2	M83513/21-H01NP	100RN100SBRP1	M83513/22-E01CP	100RC31PBSP1
M83513/19-C02CP	100RC21SBRP2	M83513/21-H02CN	100RC100SBR2	M83513/22-E01NN	100RN31PBS1
M83513/19-C02NN	100RN21SBR2	M83513/21-H02CP	100RC100SBRP2	M83513/22-E01NP	100RN31PBSP1
M83513/19-C02NP	100RN21SBRP2	M83513/21-H02NN	100RN100SBR2	M83513/22-E02CN	100RC31PBS2
M83513/19-C03CN	100RC21SBR3	M83513/21-H02NP	100RN100SBRP2	M83513/22-E02CP	100RC31PBSP2
M83513/19-C03CP	100RC21SBRP3	M83513/21-H03CN	100RC100SBR3	M83513/22-E02NN	100RN31PBS2
M83513/19-C03NN	100RN21SBR3	M83513/21-H03CP	100RC100SBRP3	M83513/22-E02NP	100RN31PBSP2
M83513/19-C03NP	100RN21SBRP3	M83513/21-H03NN	100RN100SBR3	M83513/22-E03CN	100RC31PBS3
M83513/19-D01CN	100RC25SBR1	M83513/21-H03NP	100RN100SBRP3	M83513/22-E03CP	100RC31PBSP3
M83513/19-D01CP	100RC25SBRP1	M83513/22-A01CN	100RC09PBS1	M83513/22-E03NN	100RN31PBS3
M83513/19-D01NN	100RN25SBR1	M83513/22-A01CP	100RC09PBSP1	M83513/22-E03NP	100RN31PBSP3
M83513/19-D01NP	100RN25SBRP1	M83513/22-A01NN	100RN09PBS1	M83513/22-F01CN	100RC37PBS1
M83513/19-D02CN	100RC25SBR2	M83513/22-A01NP	100RN09PBSP1	M83513/22-F01CP	100RC37PBSP1
M83513/19-D02CP	100RC25SBRP2	M83513/22-A02CN	100RC09PBS2	M83513/22-F01NN	100RN37PBS1
M83513/19-D02NN	100RN25SBR2	M83513/22-A02CP	100RC09PBSP2	M83513/22-F01NP	100RN37PBSP1
M83513/19-D02NP	100RN25SBRP2	M83513/22-A02NN	100RN09PBS2	M83513/22-F02CN	100RC37PBS2
M83513/19-D03CN	100RC25SBR3	M83513/22-A02NP	100RN09PBSP2	M83513/22-F02CP	100RC37PBSP2
M83513/19-D03CP	100RC25SBRP3	M83513/22-A03CN	100RC09PBS3	M83513/22-F02NN	100RN37PBS2
M83513/19-D03NN	100RN25SBR3	M83513/22-A03CP	100RC09PBSP3	M83513/22-F02NP	100RN37PBSP2
M83513/22-F03CN	100RC37PBS3	M83513/25-C02NN	100RN21SBS2	M83513/27-H02CP	100RC100SBSP2
M83513/22-F03CP	100RC37PBSP3	M83513/25-C02NP	100RN21SBSP2	M83513/27-H02NN	100RN100SBS2
M83513/22-F03NN	100RN37PBS3	M83513/25-C03CN	100RC21SBS3	M83513/27-H02NP	100RN100SBSP2
M83513/22-F03NP	100RN37PBSP3	M83513/25-C03CP	100RC21SBSP3	M83513/27-H03CN	100RC100SBS3
M83513/23-G01CN	100RC51PBS1	M83513/25-C03NN	100RN21SBS3	M83513/27-H03CP	100RC100SBSP3
M83513/23-G01CP	100RC51PBSP1	M83513/25-C03NP	100RN21SBSP3	M83513/27-H03NN	100RN100SBS3
M83513/23-G01NN	100RN51PBS1	M83513/25-D01CN	100RC25SBS1	M83513/27-H03NP	100RN100SBSP3
M83513/23-G01NP	100RN51PBSP1	M83513/25-D01CP	100RC25SBSP1	M83513/28-A01CN	100RC09P-C61
M83513/23-G02CN	100RC51PBS2	M83513/25-D01NN	100RN25SBS1	M83513/28-A01CP	100RC09P-C6P1
M83513/23-G02CP	100RC51PBSP2	M83513/25-D01NP	100RN25SBSP1	M83513/28-A01CT	100RC09P-C6T1
M83513/23-G02NN	100RN51PBS2	M83513/25-D02CN	100RC25SBS2	M83513/28-A01CW	100RC09P-C6PT1
M83513/23-G02NP	100RN51PBSP2	M83513/25-D02CP	100RC25SBSP2	M83513/28-A01NN	100RN09P-C61
M83513/23-G03CN	100RC51PBS3	M83513/25-D02NN	100RN25SBS2	M83513/28-A01NP	100RN09P-C6P1

Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/23-G03CP	100RC51PBSP3	M83513/25-D02NP	100RN25SBSP2	M83513/28-A01NT	100RN09P-C6T1
M83513/23-G03NN	100RN51PBS3	M83513/25-D03CN	100RC25SBS3	M83513/28-A01NW	100RN09P-C6PT1
M83513/23-G03NP	100RN51PBSP3	M83513/25-D03CP	100RC25SBSP3	M83513/28-A02CN	100RC09P-C62
M83513/24-H01CN	100RC100PBS1	M83513/25-D03NN	100RN25SBS3	M83513/28-A02CP	100RC09P-C6P2
M83513/24-H01CP	100RC100PBSP1	M83513/25-D03NP	100RN25SBSP3	M83513/28-A02CT	100RC09P-C6T2
M83513/24-H01NN	100RN100PBS1	M83513/25-E01CN	100RC31PBS1	M83513/28-A02CW	100RC09P-C6PT2
M83513/24-H01NP	100RN100PBSP1	M83513/25-E01CP	100RC31SBSP1	M83513/28-A02NN	100RN09P-C62
M83513/24-H02CN	100RCI00PBS2	M83513/25-E01NN	100RN31PBS1	M83513/28-A02NP	100RN09P-C6P2
M83513/24-H02CP	100RC100PBSP2	M83513/25-E01NP	100RN31PBSP1	M83513/28-A02NT	100RN09P-C6T2
M83513/24-H02NN	100RN100PBS2	M83513/25-E02CN	100RC31PBS2	M83513/28-A02NW	100RN09P-C6PT2
M83513/24-H02NP	100RN100PBSP2	M83513/25-E02CP	100RC31SBSP2	M83513/28-A03CN	100RC09P-C63
M83513/24-H03CN	100RCI00PBS3	M83513/25-E02NN	100RN31PBS2	M83513/28-A03CP	100RC09P-C6P3
M83513/24-H03CP	100RC100PBSP3	M83513/25-E02NP	100RN31PBSP2	M83513/28-A03CT	100RC09P-C6T3
M83513/24-H03NN	100RN100PBS3	M83513/25-E03CN	100RC31PBS3	M83513/28-A03CW	100RC09P-C6PT3
M83513/24-H03NP	100RN100PBSP3	M83513/25-E03CP	100RC31PBSP3	M83513/28-A03NN	100RN09P-C63
M83513/25-A01CN	100RC09SBS1	M83513/25-E03NN	100RN31PBS3	M83513/28-A03NP	100RN09P-C6P3
M83513/25-A01CP	100RC09SBSP1	M83513/25-E03NP	100RN31PBSP3	M83513/28-A03NT	100RN09P-C6T3
M83513/25-A01NN	100RN09SBS1	M83513/25-F01CN	100RC37PBS1	M83513/28-A03NW	100RN09P-C6PT3
M83513/25-A01NP	100RN09SBSP1	M83513/25-F01CP	100RC37SBSP1	M83513/28-B01CN	100RC15P-C61
M83513/25-A02CN	100RC09SBS2	M83513/25-F01NN	100RN37PBS1	M83513/28-B01CP	100RC15P-C6P1
M83513/25-A02CP	100RC09SBSP2	M83513/25-F01NP	100RN37PBSP1	M83513/28-B01CT	100RC15P-C6T1
M83513/25-A02NN	100RN09SBS2	M83513/25-F02CN	100RC37PBS2	M83513/28-B01CW	100RC15P-C6PT1
M83513/25-A02NP	100RN09SBSP2	M83513/25-F02CP	100RC37SBSP2	M83513/28-B01NN	100RN15P-C61
M83513/25-A03CN	100RC09SBS3	M83513/25-F02NN	100RN37PBS2	M83513/28-B01NP	100RN15P-C6P1
M83513/25-A03CP	100RC09SBSP3	M83513/25-F02NP	100RN37PBSP2	M83513/28-B01NT	100RN15P-C6T1
M83513/25-A03NN	100RN09SBS3	M83513/25-F03CN	100RC37PBS3	M83513/28-B01NW	100RN15P-C6PT1
M83513/25-A03NP	100RN09SBSP3	M83513/25-F03CP	100RC37PBSP3	M83513/28-B02CN	100RC15P-C62
M83513/25-B01CN	100RC15SBS1	M83513/25-F03NN	100RN37PBS3	M83513/28-B02CP	100RC15P-C6P2
M83513/25-B01CP	100RC15SBSP1	M83513/25-F03NP	100RN37PBSP3	M83513/28-B02CT	100RC15P-C6T2
M83513/25-B01NN	100RN15SBS1	M83513/26-G01CN	100RC51SBS1	M83513/28-B02CW	100RC15P-C6PT2
M83513/25-B01NP	100RN15SBSP1	M83513/26-G01CP	100RC51SBSP1	M83513/28-B02NN	100RN15P-C62
M83513/25-B01CT	100RC15S-BST1	M83513/26-G01NN	100RN51SBS1	M83513/28-B02NP	100RN15P-C6P2
M83513/25-B02CN	100RC15SBS2	M83513/26-G01NP	100RN51SBSP1	M83513/28-B02NT	100RN15P-C6T2
M83513/25-B02CP	100RC15SBSP2	M83513/26-G02CN	100RC51SBS2	M83513/28-B02NW	100RN15P-C6PT2
M83513/25-B02NN	100RN15SBS2	M83513/26-G02CP	100RC51SBSP2	M83513/28-B03CN	100RC15P-C63
M83513/25-B02NP	100RN15SBSP2	M83513/26-G02NN	100RN51SBS2	M83513/28-B03CP	100RC15P-C6P3
M83513/25-B03CN	100RC15SBS3	M83513/26-G02NP	100RN51SBSP2	M83513/28-B03CT	100RC15P-C6T3
M83513/25-B03CP	100RC15SBSP3	M83513/26-G03CN	100RC51SBS3	M83513/28-B03CW	100RC15P-C6PT3
M83513/25-B03NN	100RN15SBS3	M83513/26-G03CP	100RC51SBSP3	M83513/28-B03NN	100RN15P-C63
M83513/25-B03NP	100RN15SBSP3	M83513/26-G03NN	100RN51SBS3	M83513/28-B03NP	100RN15P-C6P3
M83513/25-C01CN	100RC21SBS1	M83513/26-G03NP	100RN51SBSP3	M83513/28-B03NT	100RN15P-C6T3
M83513/25-C01CP	100RC21SBSP1	M83513/27-H01CN	100RC100SBS1	M83513/28-B03NW	100RN15P-C6PT3
M83513/25-C01NN	100RN21SBS1	M83513/27-H01CP	100RC100SBSP1	M83513/28-C01CN	100RC21P-C61
M83513/25-C01NP	100RN21SBSP1	M83513/27-H01NN	100RN100SBS1	M83513/28-C01CP	100RC21P-C6P1
M83513/25-C02CN	100RC21SBS2	M83513/27-H01NP	100RN100SBSP1	M83513/28-C01CT	100RC21P-C6T1
M83513/25-C02CP	100RC21SBSP2	M83513/27-H02CN	100RC100SBS2	M83513/28-C01CW	100RC21P-C6PT1
M83513/28-C01NN	100RN21P-C61	M83513/28-E02NW	100RN31P-C6PT2	M83513/30-G01CT	100RC100P-C6T1

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Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/28-C01NP	100RN21P-C6P1	M83513/28-E03CN	100RC31P-C63	M83513/30-G01CW	100RC100P-C6PT1
M83513/28-C01NT	100RN21P-C6T1	M83513/28-E03CP	100RC31P-C6P3	M83513/30-G01NN	100RN100P-C61
M83513/28-C01NW	100RN21P-C6PT1	M83513/28-E03CT	100RC31P-C6T3	M83513/30-G01NP	100RN100P-C6P1
M83513/28-C02CN	100RC21P-C62	M83513/28-E03CW	100RC31P-C6PT3	M83513/30-G01NT	100RN100P-C6T1
M83513/28-C02CP	100RC21P-C6P2	M83513/28-E03NN	100RN31P-C63	M83513/30-G01NW	100RN100P-C6PT1
M83513/28-C02CT	100RC21P-C6T2	M83513/28-E03NP	100RN31P-C6P3	M83513/29-G02CN	100RC100P-C62
M83513/28-C02CW	100RC21P-C6PT2	M83513/28-E03NT	100RN31P-C6T3	M83513/30-G02CP	100RC100P-C6P2
M83513/28-C02NN	100RN21P-C62	M83513/28-E03NW	100RN31P-C6PT3	M83513/30-G02CT	100RC100P-C6T2
M83513/28-C02NP	100RN21P-C6P2	M83513/28-F01CN	100RC37P-C61	M83513/30-G02CW	100RC100P-C6PT2
M83513/28-C02NT	100RN21P-C6T2	M83513/28-F01CP	100RC37P-C6P1	M83513/30-G02NN	100RN100P-C62
M83513/28-C02NW	100RN21P-C6PT2	M83513/28-F01CT	100RC37P-C6T1	M83513/30-G02NP	100RN100P-C6P2
M83513/28-C03CN	100RC21P-C63	M83513/28-F01CW	100RC37P-C6PT1	M83513/30-G02NT	100RN100P-C6T2
M83513/28-C03CP	100RC21P-C6P3	M83513/28-F01NN	100RN37P-C61	M83513/30-G02NW	100RN100P-C6PT2
M83513/28-C03CT	100RC21P-C6T3	M83513/28-F01NP	100RN37P-C6P1	M83513/30-G03CN	100RC100P-C63
M83513/28-C03CW	100RC21P-C6PT3	M83513/28-F01NT	100RN37P-C6T1	M83513/30-G03CP	100RC100P-C6P3
M83513/28-C03NN	100RN21P-C63	M83513/28-F01NW	100RN37P-C6PT1	M83513/30-G03CT	100RC100P-C6T3
M83513/28-C03NP	100RN21P-C6P3	M83513/28-F02CN	100RC37P-C62	M83513/30-G03CW	100RC100P-C6PT3
M83513/28-C03NT	100RN21P-C6T3	M83513/28-F02CP	100RC37P-C6P2	M83513/30-G03NN	100RN100P-C63
M83513/28-C03NW	100RN21P-C6PT3	M83513/28-F02CT	100RC37P-C6T2	M83513/30-G03NP	100RN100P-C6P3
M83513/28-D01CN	100RC25P-C61	M83513/28-F02CW	100RC37P-C6PT2	M83513/30-G03NT	100RN100P-C6T3
M83513/28-D01CP	100RC25P-C6P1	M83513/28-F02NN	100RN37P-C62	M83513/30-G03NW	100RN100P-C6PT3
M83513/28-D01CT	100RC25P-C6T1	M83513/28-F02NP	100RN37P-C6P2	M83513/31-A01CN	100RC09S-C61
M83513/28-D01CW	100RC25P-C6PT1	M83513/28-F02NT	100RN37P-C6T2	M83513/31-A01CP	100RC09S-C6P1
M83513/28-D01NN	100RN25P-C61	M83513/28-F02NW	100RN37P-C6PT2	M83513/31-A01CT	100RC09S-C6T1
M83513/28-D01NP	100RN25P-C6P1	M83513/28-F03CN	100RC37P-C63	M83513/31-A01CW	100RC09S-C6PT1
M83513/28-D01NT	100RN25P-C6T1	M83513/28-F03CP	100RC37P-C6P3	M83513/31-A01NN	100RN09S-C61
M83513/28-D01NW	100RN25P-C6PT1	M83513/28-F03CT	100RC37P-C6T3	M83513/31-A01NP	100RN09S-C6P1
M83513/28-D02CN	100RC25P-C62	M83513/28-F03CW	100RC37P-C6PT3	M83513/31-A01NT	100RN09S-C6T1
M83513/28-D02CP	100RC25P-C6P2	M83513/28-F03NN	100RN37P-C63	M83513/31-A01NW	100RN09S-C6PT1
M83513/28-D02CT	100RC25P-C6T2	M83513/28-F03NP	100RN37P-C6P3	M83513/31-A02CN	100RC09S-C62
M83513/28-D02CW	100RC25P-C6PT2	M83513/28-F03NT	100RN37P-C6T3	M83513/31-A02CP	100RC09S-C6P2
M83513/28-D02NN	100RN25P-C62	M83513/28-F03NW	100RN37P-C6PT3	M83513/31-A02CT	100RC09S-C6T2
M83513/28-D02NP	100RN25P-C6P2	M83513/29-G01CN	100RC51P-C61	M83513/31-A02CW	100RC09S-C6PT2
M83513/28-D02NT	100RN25P-C6T2	M83513/29-G01CP	100RC51P-C6P1	M83513/31-A02NN	100RN09S-C62
M83513/28-D02NW	100RN25P-C6PT2	M83513/29-G01CT	100RC51P-C6T1	M83513/31-A02NP	100RN09S-C6P2
M83513/28-D03CN	100RC25P-C63	M83513/29-G01CW	100RC51P-C6PT1	M83513/31-A02NT	100RN09S-C6T2
M83513/28-D03CP	100RC25P-C6P3	M83513/29-G01NN	100RN51P-C61	M83513/31-A02NW	100RN09S-C6PT2
M83513/28-D03CT	100RC25P-C6T3	M83513/29-G01NP	100RN51P-C6P1	M83513/31-A03CN	100RC09S-C63
M83513/28-D03CW	100RC25P-C6PT3	M83513/29-G01NT	100RN51P-C6T1	M83513/31-A03CP	100RC09S-C6P3
M83513/28-D03NN	100RN25P-C63	M83513/29-G01NW	100RN51P-C6PT1	M83513/31-A03CT	100RC09S-C6T3
M83513/28-D03NP	100RN25P-C6P3	M83513/29-G02CN	100RC51P-C62	M83513/31-A03CW	100RC09S-C6PT3
M83513/28-D03NT	100RN25P-C6T3	M83513/29-G02CP	100RC51P-C6P2	M83513/31-A03NN	100RN09S-C63
M83513/28-D03NW	100RN25P-C6PT3	M83513/29-G02CT	100RC51P-C6T2	M83513/31-A03NP	100RN09S-C6P3
M83513/28-E01CN	100RC31P-C61	M83513/29-G02CW	100RC51P-C6PT2	M83513/31-A03NT	100RN09S-C6T3
M83513/28-E01CP	100RC31P-C6P1	M83513/29-G02NN	100RN51P-C62	M83513/31-A03NW	100RN09S-C6PT3
M83513/28-E01CT	100RC31P-C6T1	M83513/29-G02NP	100RN51P-C6P2	M83513/31-B01CN	100RC15S-C61
M83513/28-E01CW	100RC31P-C6PT1	M83513/29-G02NT	100RN51P-C6T2	M83513/31-B01CP	100RC15S-C6P1

Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/28-E01NN	100RN31P-C61	M83513/29-G02NW	100RN51P-C6PT2	M83513/31-B01CT	100RC15S-C6T1
M83513/28-E01NP	100RN31P-C6P1	M83513/29-G03CN	100RC51P-C63	M83513/31-B01CW	100RC15S-C6PT1
M83513/28-E01NT	100RN31P-C6T1	M83513/29-G03CP	100RC51P-C6P3	M83513/31-B01NN	100RN15S-C61
M83513/28-E01NW	100RN31P-C6PT1	M83513/29-G03CT	100RC51P-C6T3	M83513/31-B01NP	100RN15S-C6P1
M83513/28-E02CN	100RC31P-C62	M83513/29-G03CW	100RC51P-C6PT3	M83513/31-B01NT	100RN15S-C6T1
M83513/28-E02CP	100RC31P-C6P2	M83513/29-G03NN	100RN51P-C63	M83513/31-B01NW	100RN15S-C6PT1
M83513/28-E02CT	100RC31P-C6T2	M83513/29-G03NP	100RN51P-C6P3	M83513/31-B02CN	100RC15S-C62
M83513/28-E02CW	100RC31P-C6PT2	M83513/29-G03NT	100RN51P-C6T3	M83513/31-B02CP	100RC15S-C6P2
M83513/28-E02NN	100RN31P-C62	M83513/29-G03NW	100RN51P-C6PT3	M83513/31-B02CT	100RC15S-C6T2
M83513/28-E02NP	100RN31P-C6P2	M83513/30-G01CN	100RC100P-C61	M83513/31-B02CW	100RC15S-C6PT2
M83513/28-E02NT	100RN31P-C6T2	M83513/31-D02CW	100RC25S-C6PT2	M83513/31-F02CW	100RC37S-C6PT2
M83513/31-B02NN	100RN15S-C62	M83513/31-D02NN	100RN25S-C62	M83513/31-F02NN	100RN37S-C62
M83513/31-B02NP	100RN15S-C6P2	M83513/31-D02NP	100RN25S-C6P2	M83513/31-F02NP	100RN37S-C6P2
M83513/31-B02NT	100RN15R-C6T2	M83513/31-D02NT	100RN25S-C6T2	M83513/31-F02NT	100RN37S-C6T2
M83513/31-B02NW	100RN15S-C6PT2	M83513/31-D02NW	100RN25S-C6PT2	M83513/31-F02NW	100RN37S-C6PT2
M83513/31-B03CN	100RC15S-C63	M83513/31-D03CN	100RC25S-C63	M83513/31-F03CN	100RC37S-C63
M83513/31-B03CP	100RC15S-C6P3	M83513/31-D03CP	100RC25S-C6P3	M83513/31-F03CP	100RC37S-C6P3
M83513/31-B03CT	100RC15S-C6T3	M83513/31-D03CT	100RC25S-C6T3	M83513/31-F03CT	100RC37S-C6T3
M83513/31-B03CW	100RC15S-C6PT3	M83513/31-D03CW	100RC25S-C6PT3	M83513/31-F03CW	100RC37S-C6PT3
M83513/31-B03NN	100RN15S-C63	M83513/31-D03NN	100RN25S-C63	M83513/31-F03NN	100RN37S-C63
M83513/31-B03NP	100RN15S-C6P3	M83513/31-D03NP	100RN25S-C6P3	M83513/31-F03NP	100RN37S-C6P3
M83513/31-B03NT	100RN15S-C6T3	M83513/31-D03NT	100RN25S-C6T3	M83513/31-F03NT	100RN37S-C6T3
M83513/31-B03NW	100RN15S-C6PT3	M83513/31-D03NW	100RN25S-C6PT3	M83513/31-F03NW	100RN37S-C6PT3
M83513/31-C01CN	100RC21S-C61	M83513/31-E01CN	100RC31S-C61	M83513/32-G01CP	100RC100P-C6P1
M83513/31-C01CP	100RC21S-C6P1	M83513/31-E01CP	100RC31S-C6P1	M83513/32-G01CN	100RC51S-C61
M83513/31-C01CT	100RC21S-C6T1	M83513/31-E01CT	100RC31S-C6T1	M83513/32-G01CP	100RC51S-C6P1
M83513/31-C01CW	100RC21S-C6PT1	M83513/31-E01CW	100RC31S-C6PT1	M83513/32-G01CT	100RC51S-C6T1
M83513/31-C01NN	100RN21S-C61	M83513/31-E01NN	100RN31S-C61	M83513/32-G01CW	100RC51S-C6PT1
M83513/31-C01NP	100RN21S-C6P1	M83513/31-E01NP	100RN31S-C6P1	M83513/32-G01NN	100RN51S-C61
M83513/31-C01NT	100RN21S-C6T1	M83513/31-E01NT	100RN31S-C6T1	M83513/32-G01NP	100RN51S-C6P1
M83513/31-C01NW	100RN21S-C6PT1	M83513/31-E01NW	100RN31S-C6PT1	M83513/32-G01NT	100RN51S-C6T1
M83513/31-C02CN	100RC21S-C62	M83513/31-E02CN	100RC31S-C62	M83513/32-G01NW	100RN51S-C6PT1
M83513/31-C02CP	100RC21S-C6P2	M83513/31-E02CP	100RC31S-C6P2	M83513/32-G02CN	100RC51S-C62
M83513/31-C02CT	100RC21S-C6T2	M83513/31-E02CT	100RC31S-C6T2	M83513/32-G02CP	100RC51S-C6P2
M83513/31-C02CW	100RC21S-C6PT2	M83513/31-E02CW	100RC31S-C6PT2	M83513/32-G02CT	100RC51S-C6T2
M83513/31-C02NN	100RN21S-C62	M83513/31-E02NN	100RN31S-C62	M83513/32-G02CW	100RC51S-C6PT2
M83513/31-C02NP	100RN21S-C6P2	M83513/31-E02NP	100RN31S-C6P2	M83513/32-G02NN	100RN51S-C62
M83513/31-C02NT	100RN21S-C6T2	M83513/31-E02NT	100RN31S-C6T2	M83513/32-G02NP	100RN51S-C6P2
M83513/31-C02NW	100RN21S-C6PT2	M83513/31-E02NW	100RN31S-C6PT2	M83513/32-G02NT	100RN51S-C6T2
M83513/31-C03CN	100RC21S-C63	M83513/31-E03CN	100RC31S-C63	M83513/32-G02NW	100RN51S-C6PT2
M83513/31-C03CP	100RC21S-C6P3	M83513/31-E03CP	100RC31S-C6P3	M83513/32-G03CN	100RC51S-C63
M83513/31-C03CT	100RC21S-C6T3	M83513/31-E03CT	100RC31S-C6T3	M83513/32-G03CP	100RC51S-C6P3
M83513/31-C03CW	100RC21S-C6PT3	M83513/31-E03CW	100RC31S-C6PT3	M83513/32-G03CT	100RC51S-C6T3
M83513/31-C03NN	100RN21S-C63	M83513/31-E03NN	100RN31S-C63	M83513/32-G03CW	100RC51S-C6PT3



# PART NUMBER CROSS REFERENCE

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Mil-Spec	Amphenol	Mil-Spec	Amphenol	Mil-Spec	Amphenol
M83513/31-C03NP	100RN21S-C6P3	M83513/31-E03NP	100RN31S-C6P3	M83513/32-G03NN	100RN51S-C63
M83513/31-C03NT	100RN21S-C6T3	M83513/31-E03NT	100RN31S-C6T3	M83513/32-G03NP	100RN51S-C6P3
M83513/31-C03NW	100RN21S-C6PT3	M83513/31-E03NW	100RN31S-C6PT3	M83513/32-G03NT	100RN51S-C6T3
M83513/31-D01CN	100RC25S-C61	M83513/31-F01CN	100RC37S-C61	M83513/32-G03NW	100RN51S-C6PT3
M83513/31-D01CP	100RC25S-C6P1	M83513/31-F01CP	100RC37S-C6P1	M83513/33-H01CN	100RC100S-C61
M83513/31-D01CT	100RC25S-C6T1	M83513/31-F01CT	100RC37S-C6T1	M83513/33-H01CP	100RC100S-C6P1
M83513/31-D01CW	100RC25S-C6PT1	M83513/31-F01CW	100RC37S-C6PT1	M83513/33-H01CT	100RC100S-C6T1
M83513/31-D01NN	100RN25S-C61	M83513/31-F01NN	100RN37S-C61	M83513/33-H01CW	100RC100S-C6PT1
M83513/31-D01NP	100RN25S-C6P1	M83513/31-F01NP	100RN37S-C6P1	M83513/33-H01NN	100RN100S-C61
M83513/31-D01NT	100RN25S-C6T1	M83513/31-F01NT	100RN37S-C6T1	M83513/33-H01NP	100RN100S-C6P1
M83513/31-D01NW	100RN25S-C6PT1	M83513/31-F01NW	100RN37S-C6PT1	M83513/33-H01NT	100RN100S-C6T1
M83513/31-D02CN	100RC25S-C62	M83513/31-F02CN	100RC37S-C62	M83513/33-H01NW	100RN100S-C6PT1
M83513/31-D02CP	100RC25S-C6P2	M83513/31-F02CP	100RC37S-C6P2	M83513/33-H02CN	100RC100S-C62
M83513/31-D02CT	100RC25S-C6T2	M83513/31-F02CT	100RC37S-C6T2	M83513/33-H02CP	100RC100S-C6P2
M83513/33-H02CT	100RC100S-C6T2				
M83513/33-H02CW	100RC100S-C6PT2				
M83513/33-H02NN	100RN100S-C62				
M83513/33-H02NP	100RN100S-C6P2				
M83513/33-H02NT	100RN100S-C6T2				
M83513/33-H02NW	100RN100S-C6PT2				
M83513/33-H03CN	100RC100S-C63				
M83513/33-H03CP	100RC100S-C6P3				
M83513/33-H03CT	100RC100S-C6T3				
M83513/33-H03CW	100RC100S-C6PT3				
M83513/33-H03NN	100RN100S-C63				
M83513/33-H03NP	100RN100S-C6P3				
M83513/33-H03NT	100RN100S-C6T3				
M83513/33-H03NW	100RN100S-C6PT3				

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