



Type SMP/SMPM Connectors Product Catalog



About Bel

Bel is a publicly traded company that has been operated by the same family for over 65 years. Our history of organic growth and acquisitions have broadened our product portfolio. This has established Bel as a world leader with a diverse offering of power, protection and interconnect products. We design and manufacture these products which are primarily used in the networking, telecommunications, computing, military, aerospace, transportation and broadcasting industries. Bel's portfolio of products also finds application in the automotive, medical and consumer electronics markets.

About Johnson

Johnson[™] designs and manufactures an industry-leading line of RF coaxial connectors and adapters, available in both 50 and 75 Ohm versions, operating up to 67GHz. The range of products available within the Johnson product line includes board and cable mount connectors across subminiature, micro-miniature, ultra-miniature and millimeter wave classes as well as semi-rigid, conformable, and flexible RF coaxial cables. Johnson connectors are designed to provide the highest quality data transmission for data, audio, and video applications.

The SMP Interface offers superior performance up to 40GHz and is compatible with all SMP and GPO®* Connectors. They offer high electrical reliability where extreme shock and vibration conditions are experienced.

Applications

(Military and Commercial)

- Phased arrays
- Active antennas
- Satellites
- Communication
- Airborne radar
- Shipborne radar equipment
- · Ground radar
- Hi-density modular packaging
- Axial/radial misalignment solutions

Markets

- Aerospace
- Broadband
- Instrumentation
- Telecom
- Defense
- Microwave

Transmission Options

- Box-to-box
- · Cable-to-board
- Board-to-board
- Cable-to-panel-to-board

Table of Contents

Introduction Description 3 Specifications Specifications 4 Application Part numbers 8

Assembly Instuctions	
SMP Customer Tooling	12
SMP Straight Female Solder Style for 0.047 OD	
Semi-Rigid Cable	13
SMP Straight Female Solder Style for 0.086 OD	
Semi-Rigid Cable	15
SMP Right Angle Female Solder Style for 0.086 OD	
Semi-Rigid Cable	16
SMP Hermetic Seal Installation	17
SMP Shroud Installation	17

SMPM Connectors

Product Overview

Introduction	18

19

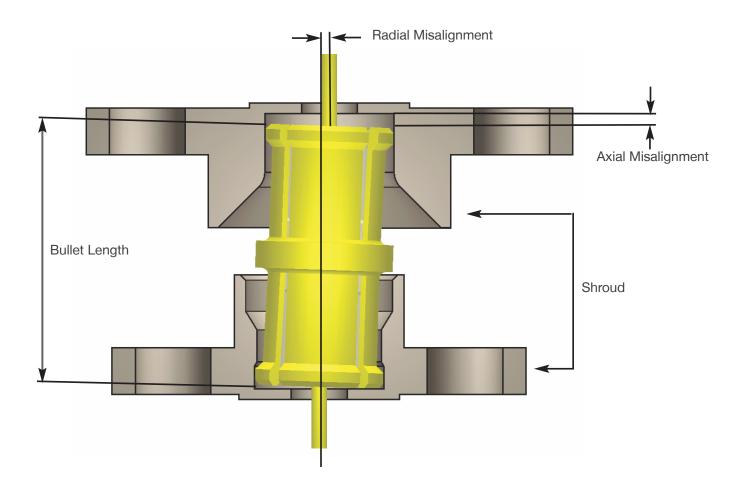
Description

One of the key benefits of the SMP connector interface is its use in high frequency blind-mate applications. The design of the SMP bullet and shroud system allows for both axial and radial misalignment. The basic system is comprised of an inner "bullet" adapter, and two outer receptacles called "shrouds". The bullet provides a flexible link between the shroud connections.

In blind-mate applications, one shroud connector will be typically specified as a snap-on interface and the other as a slide-on. This ensures that the bullet adapter remains fixed in the same shroud connector when the connection is disengaged.

The two snap-on interfaces Full Detent (FD) and Limited Detent (LD) each have different engage and disengage coupling forces. The LD is typically selected as the snap-on interface in PCB mount or blind-mate applications, while the FD is mainly used for cabled connections where higher retention forces are required.

The two slide-on interfaces Smooth Bore (SB) and Catcher's Mitt (CM) allow for reduced connection forces as compared to the snap-on versions. The push-on interface creates a sliding connection that does not physically locate the mating reference planes, allowing for axial and radial misalignment. Both the SB and CM have the same engage/disengage forces; however the CM is typically specified as the shroud configuration in blind-mate applications as its generous lead-in chamfer helps capture and guide the bullet into place.



SPECIFICATIONS

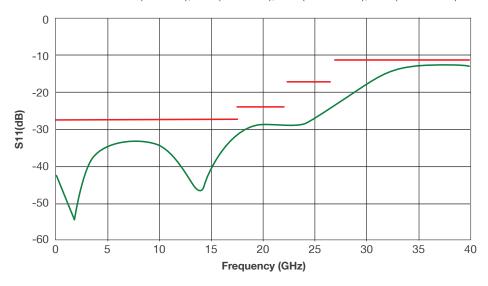
Electrical					
Impedance	50 ohms				
Frequency Range:	Bullet adapter (0.254 length), semi-rigid	0-40GHz			
	All other in-series adapters, semi-rigid rig	ght angle cabled c	connectors	0-18GHz	
	Field replaceable connectors, end launch mount connectors	n connectors, hern	netic feedthroughs F	PC 0-12GHz	
VSWR: (maximum)	Bullet adapter (0.254 length:	0-18GHz 1.10	18-23GHz 1.15	23-26.5GHz 1.30	26.5-40GHz 1.70
	Semi-rigid straight cabled connectors:	0-18GHz 20	18-26.5GHz 1.35	26.5-40GHz 1.70	-
	All other in-series adapters:	0-4GHz 1.10	4-12GHz 1.15	12-18GHz 1.20	
	Semi-rigid right angle cabled connectors:	0-18GHz 1.20			
	Field replaceable connectors (typical, measured back to back with seal pin)	0-18GHz 1.15			
	Un-cabled connectors (dependant on application)	Not applicable			
Insertion Loss:	In-series adapters, field replaceable connectors $0.10 \sqrt{F}$ (GHz)				
(dB maximum, tested at 10GHz)	Semi-rigid cabled connectors	0.12 √ F (C	GHz)		
	All other un-cabled connector	Not applic	able		
Working Voltage:	335 Vrms maximum at sea level, 65 Vrms	s maximum at 70,0	000 feet		
Dielectric Withstanding Voltage:	500 Vrms minimum at sea level				
RF High Potential Withstanding Voltage:	325 Vrms minimum at sea level, tested a	t 4 and 7MHz			
Corona Level:	190 Vrms minimum at 70,000 feet				
Contact Resistance:	Center contact (connectors and adapters	s)		6.0	
(milliohms maximum initial, not applicable after envi-	Outer contact (connectors and adapters)			2.0	
ronmental testing)	Cable shield to body (semi-rigid cabled of	0.5			
Insulation Resistance:	5000 megohms minimum				
RF Leakage:	Cabled and field replaceable connectors			-80	
(dB typical, tested at 2.5GHz)	In-series adapters			-65	
	All other un-cabled connectors			Not applic	able

Mechanical			
Interface Design: MIL-STD-348A,	Series SMP		
Engagement Force	Full detent (FD)		15.0
(pounds maximum, mated pair)	Limited detent (LD)		10.0
	Smooth bore and catcher's mitt (SB and CM)		2.0
Disengagement Force	Full detent (FD)		5.0
(pounds minimum, mated pair)	Limited detent (LD)		12.0
	Smooth bore and catcher's mitt (SB and CM)		0.5
Mated Radial Misaligment	Between centerlines of mating planes (FD,LD, SB)		0.010"
(inches maximum allowed, female adapters only)	Between centerlines of mating planes (CM only)	0.020"	
Mated Axial Misalignment	010 inches maximum allowed between mating planes (female	adapters only)	
Durability	Full detent (all female connectors and adapters)		100
(mating cycles minimum)	Limited detent (female adapters only)		500
	Smooth bore and catcher's mitt (female adapters only)		1000
Contact Retention	1.5 pounds minimum axial force (captivated contacts only)		
Cable Retention:		Axial Force* (lbs)	Torque (in-oz)
(minimum)	Cabled connectors for RG-405 (0.086 semi-rigid)	30	16.0
	Cabled connectors for M17/151 (0.047 semi-rigid)	20	N/A

^{*}Or cable breaking strength, whichever is less

Typical Measured Return Loss Bullet Adapter 127-0901-801

- **—** 127-0801-901
- VSWR = 1.10 (0-18GHz), 1.15 (18-23GHz), 1.30 (23-26.5GHz), 1.70 (26.5-40GHz)



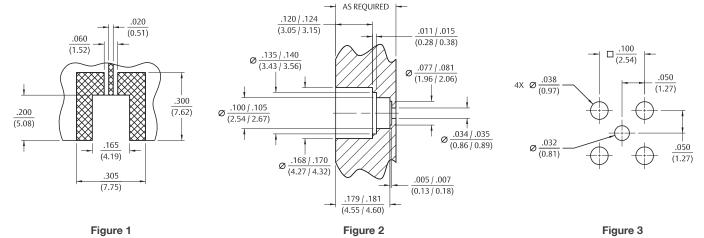
SPECIFICATIONS

Environmental	
Meets or exceeds the applicable	paragraph of MIL-PRF-39012
Operating temperature	-65°C to +165°C
Thermal shock	MIL-STD-202, Method 107, Condition B (except high temp +165°C or max high temp of cable)
Corrosion	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D
Shock (specified pulse)	MIL-STD-202, Method 213, Condition I
Moisture resistance	MIL-STD-202, Method 106 (except step 7b omitted)

Mechanical	
Spring finger (female) and end launch (male) bodies: 348A, Series SMP	Beryllium copper per ASTM B196, gold* plated per MIL-DTL-45204 (0.00005" min)
Hermetic seal bodies (male)	Kovar alloy per ASTM F15, gold* plated per MIL-DTL-45204 (0.00005" min)
All other shroud bodies (male)	Stainless steel, type 303, per ASTM A582, passivated per MIL-DTL-14072 (EL 300)
Connector and adapter contacts (male and female)	Beryllium copper per ASTM B196, gold* plated per MIL-DTL-45204 (0.00005" min)
Hermetic seal center pins	Kovar alloy per ASTM F15, gold* plated per MIL-DTL-45204 (0.00005" min)
EMI/anti-rock rings	Beryllium copper per ASTM B196, gold* plated per MIL-DTL-45204 (0.00003" min)
PC mount legs	Brass per ASTM B16, gold* plated per MIL-DTL-45204 (0.00003" min)
Connector and adapter insulators	Brass per ASTM B16, gold* plated per MIL-DTL-45204 (0.00003" min)
Hermetic seal glass	Corning 7070

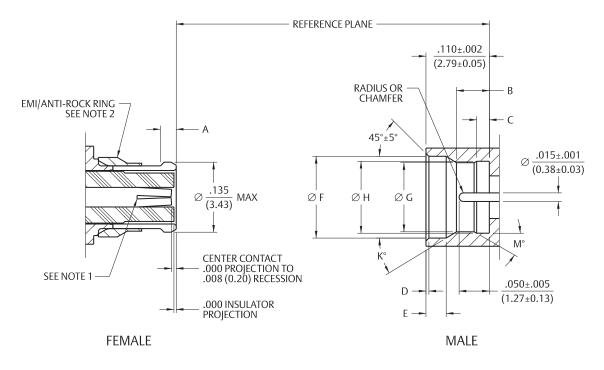
^{*}All gold plated parts include a 0.00005" minimum nickel barrier layer

Mounting Holes



^{*}This pattern is for reference only. Pattern will vary depending on board type and specific electrical and mechanical requirements.

Mating Engagement for SMP Series per MIL-STD-348A



Notes:

- 1. Socket to accept mating pin Ø0.015±0.001 (0.38±0.03).
- 2. EMI/Anti-Rock Ring configuration optional, used on cabled connectors only. Shall not prevent proper mating engagement.
- 3. All dimensions shown in inches. Metric equivalents (rounded to nearest 0.01mm) are given for general information only.

SMP Female Connector Interface

Dimension	Cab	Cabled		abled
	Minimum	Maximum	Minimum	Maximum
А	0.025 (0.64)	0.035 (0.89)	0.018 (0.46)	0.025 (0.64)

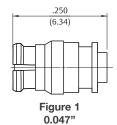
SMP Male Connector Interface

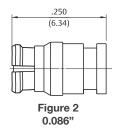
Dimension	Full C	Petent	Limited	Detent	Smoot	h Bore	Catche	er's Mitt
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
В	0.051 (1.30)	0.057 (1.45)	0.054 (1.37)	0.060 (1.52)	0.059 (1.50)	0.065 (1.65)	N/A	N/A
С	0.0205 (0.52)	0.0235 (0.60)	0.0205 (0.52)	0.0235 (0.60)	N/A	N/A	N/A	N/A
D	0.003 (0.08)	0.008 (0.20)	0.003 (0.08)	0.008 (0.20)	0.003 (0.08)	0.008 (0.20)	0.043 (1.09)	0.047 (1.19)
E	0.033 (0.84)	0.037 (0.94)	0.033 (0.84)	0.037 (0.94)	0 .033 (0.84)	0.037 (0.94)	N/A	N/A
F	0.139 (3.53)	0.145 (3.68)	0.139 (3.53)	0.145 (3.68)	0.139 (3.53)	0.145 (3.68)	0.123 (3.12)	0.127 (3.23)
G	0.114 (2.90)	0.118 (3.00)	0.118 (3.00)	0.122 (3.10)	0.123 (3.12)	0.127 (3.23)	N/A	N/A
Н	0.124 (3.15)	0.126 (3.20)	0.124 (3.15)	0.126 (3.20)	N/A	N/A	N/A	N/A
K	35° REF	35° REF	N/A	N/A				
M	30° REF	30° REF	30° REF	30° REF	N/A	N/A	N/A	N/A

APPLICATION

Straight Solder Type Cabled Female





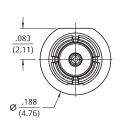


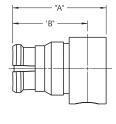
Cable Type	VSWR & Frequency Range*	Gold Plated	Figure
M17/151, 0.047 Semi-Rigid	1.20 max 0-18GHz, 1.35 max 18-26.5GHz, 1.70 max 26.5-40GHz	127-0692-001	1
RG-405, 0.086 Semi-Rigid	1.20 max 0-18GHz, 1.35 max 18-26.5GHz, 1.70 max 26.5-40GHz	127-0693-001	2

^{*} Specifications dependent on cable ratings

Right Angle Solder Type Cabled Female



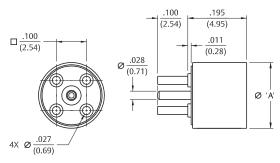




Cable Type	VSWR & Frequency Range	Gold Plated	"A"	"B"
M17/151, 0.047 Semi-Rigid	1.20 max 0-18GHz	127-0692-101	0.248 (6.30)	0.197 (5.00)
RG-405, 0.086 Semi-Rigid	1.20 max 0-18GHz	127-0693-101	0.271 (6.88)	0.209 (5.31)

Straight PCMount Male Receptacle





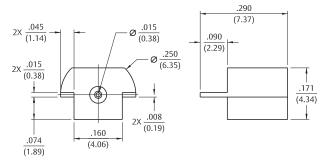
Interface	Frequency Range	Passivated*	"A"
Full Detent	0-12GHz	127-0701-201	0.218 (5.54)
Limited Detent	0-12GHz	127-1701-201	0.218 (5.54)
Smooth Bore	0-12GHz	127-2701-201	0.218 (5.54)
Catcher's Mitt	0-12GHz	127-3701-201	0.234 (5.94)

^{*} Base and legs gold plated brass

Mounting hole layout figure 3 on page 7

End Launch Male Receptacle - Surface Mount

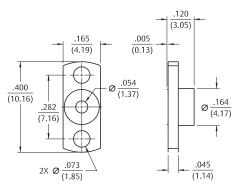




Interface	Frequency Range	Gold Plated	Figure
Full Detent	0-18GHz	127-0701-801	Stock
Full Detent	0-18GHz	127-0701-802	Tape and reel -1000 pieces
Limited Detent	0-18GHz	127-1701-801	Stock
Limited Detent	0-18GHz	127-1701-802	Tape and reel -1000 pieces
Smooth Bore	0-18GHz	127-2701-801	Stock
Smooth Bore	0-18GHz	127-2701-802	Tape and reel -1000 pieces

2-Hole Flange Mount Male Shroud - Without Contact

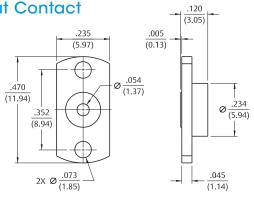




Interface	Passivated
Full Detent	127-0701-602
Limited Detent	127-1701-602
Smooth Bore	127-2701-602

2-Hole Flange Mount Male Catcher's Mitt Shroud - Without Contact

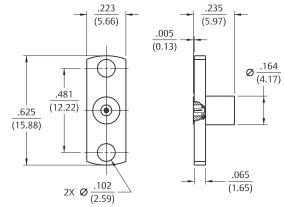




Interface	Passivated
Catcher's Mitt	127-3701-602

2-Hole Flange Mount Male Field Replaceable



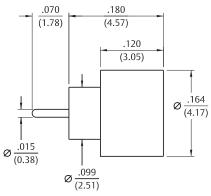


Interface	VSWR & Frequency Range*	Passivated	Accepts Pin Size
Full Detent	1.15 typical 0-18GHz	127-0701-612	0.012 (0.030)
Limited Detent	1.15 typical 0-18GHz	127-1701-612	0.012 (0.030)
Smooth Bore	1.15 typical 0-18GHz	127-2701-612	0.012 (0.030)

^{*} Two connectors mated back to back with hermetic seal fixture

Hermetic Seal Male

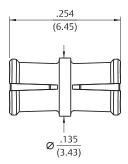




Interface	Frequency Range	Gold Plated
Full Detent	0-18GHz	127-0701-601
Mannitied Doctoryout figure 2 on page 7	0-18GHz	127-1701-601
Smooth Bore	0-18GHz	127-2701-601

Female to Female Bullet Adapter

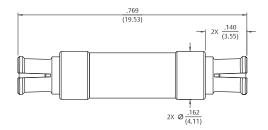




VSWR & Frequency Range	Gold Plated
1.10 Max 0-18GHz, 1.15 Max 18-23GHz, 1.30 Max 23-26.5GHz, 1.70 Max 26.5-40GHz	127-0901-801

Female to Female Adapter

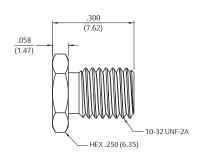




VSWR & Frequency Range	Gold Plated
1.10 Max 0-4GHz, 1.15 Max 4-12GHz, 1.20 Max 12-18GHz	127-0901-811

Male to Male Catcher's Mitt Adapters, Stainless Steel



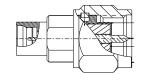


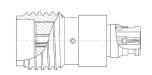
Interface	VSWR & Frequency Range	Stainless Steel, Passivated
Full Detent	1.10 max 0-4GHz, 1.15 max 4-12GHz, 1.20 max 12-18GHz	127-0901-822
Limited Detent	1.10 max 0-4GHz, 1.15 max 4-12GHz, 1.20 max 12-18GHz	127-1901-822
Smooth Bore	1.10 max 0-4GHz, 1.15 max 4-12GHz, 1.20 max 12-18GHz	127-2901-822

SMA to **SMP** Adapters







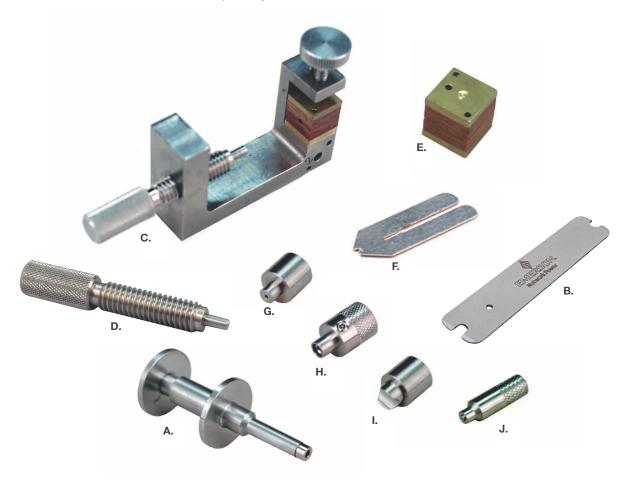


Interface	VSWR & Frequency Range	Gold Plated
SMA Plug to SMP Plug	1.20 max 0-20 GHz, 1.25 max 20-26.5 GHz	134-1019-441
SMA Plug to SMP Jack	1.20 max 0-20 GHz, 1.25 max 20-26.5 GHz	134-1019-451
SMA Jack to SMP Jack	1.20 max 0-20 GHz, 1.25 max 20-26.5 GHz	134-1019-461
SMA Jack to SMP Plug	1.20 max 0-20 GHz, 1.25 max 20-26.5 GHz	134-1019-471

APPLICATION

SMP Customer Tooling

Accurate assembly of the semi-rigid cabled connectors is obtained with the tools listed below. Industry standard devices are used if possible for customer convenience and tool compatibility.



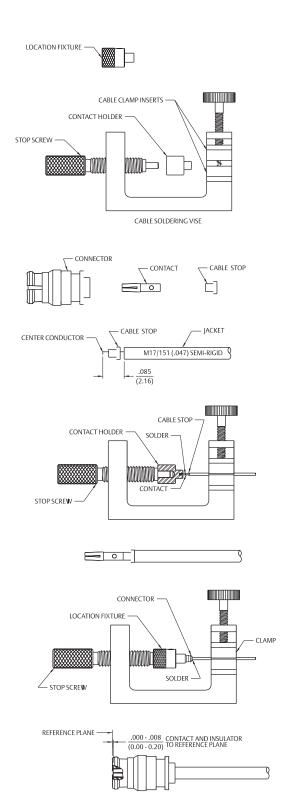
Item	Description	Part Number
A	SMP bullet extraction tool	127-0000-900
В	SMP cabled connector removal tool	127-0000-901
С	Soldering vise (does not include clamp inserts or stop screw)	140-0000-962
D	Stop screw for soldering vise	140-0000-981
Е	Semi-rigid cable clamp inserts for 0.086" OD cable Semi-rigid cable clamp inserts for 0.047" OD cable	140-0000-964 140-0000-997
F	Solder shim for 0.086" OD cable	140-0000-984
G	SMP center contact holder	127-0000-902
Н	SMP interface locator tool	127-0000-903
I	SMP right angle body holder	127-0000-904
J	SMP FD shroud centering tool SMP LD shroud centering tool SMP SB shroud centering tool	127-0000-905 127-0000-906 127-0000-907

SMP Straight Female Solder Style for 0.047 OD Semi-Rigid Cable

- 1. Identify tools (5 piece parts) and connector parts (3 piece parts).
- 2. Strip cable jacket and dielectric to dimension shown. Do not nick center conductor. Clean all debris from prepared cable.
- 3. Insert center conductor into cable stop as shown and place contact onto center conductor.
- 4. Insert contact into contact holder fixture and clamp cable in vise. Tighten stop screw until light pressure is applied between contact, cable stop and cable jacket.
- 5. Solder contact to center conductor through solder hole using 0.016 (0.41) diameter flux core solder wire or solder paste. Use a minimum amount of solder and heat for a good joint. Do not allow heat to build up for a long period of time as cable stop may melt.
- After solder joint has cooled, remove cable from vise. Remove any excess solder from contact with a sharp blade and clean all debris from contact and cable.
- 7. Insert contact into connector assembly, making sure cable stop bottoms out against internal shoulder of connector body. Insert connector assembly into interface location fixture and clamp cable in vise. Make sure connector assembly isfully engaged within location fixture. Tighten stop screw until light pressure is applied between connector assembly and cable stop.
- 8. Solder end of connector body to cable jacket, using a minimum amount of solder and heat for a full fillet joint. Allow assembly to cool before removing connector from vise and location fixture. Best results are obtained when contact location is flush to 0.004 (0.10) recessed from reference plane. Interface location fixture is pre-set atfactory, but can be adjusted to control location.

Cable Group	Part Number
MIL-C-17/151, 0.047 Semi-Rigid	127-0692-101

Tool	Part Number	
Cable Vise	140-0000-962	
Stop Screw	140-0000-981	
Clamp Inserts	140-0000-997	
Contact Holder	127-0000-902	
Interface Location Fixture	127-0000-903	

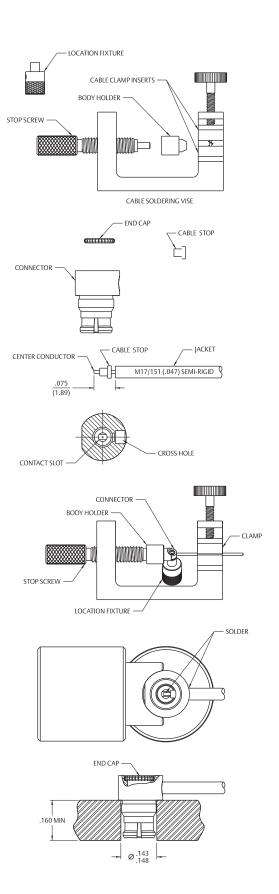


SMP Right Angle Female Solder Style for 0.047 OD Semi-Rigid Cable

- 1. Identify tools (5 piece parts) and connector parts (3 piece parts).
- 2. Strip cable jacket and dielectric to dimension shown. Do not nick center conductor. Clean all debrisfrom prepared cable.
- Insert center conductor into cable stop as shown. Make sure slot in connector contact is aligned with cross hole in body as shown. Insert cable into cross hole in connector body, making sure cable stop bottoms out against internal shoulder of connector body.
- 4. Insert connector assembly into interface location fixture and clamp cable in vise using body holder fixture as shown. Tighten stop screw until light pressure is applied between connector body, cable stop and cable jacket.
- Solder contact to center conductor through rear access port in connector body using a minimum amount of solder and heat for a good joint.
- 6. After center conductor solder joint has cooled, solder connector body to cable jacket, using a minimum amount of solder and heat for a full fillet joint. Take care so that solder does notflow onto anti-rock ring or into rear access port. Allow assembly to cool before removing connector from vise and location fixture.
- Using a fixture plate as shown, press end cap into rear access port using a 0.156 (3.96) diameter flat punch untilfully seated within body counter bore.
- 8. Best results are obtained when contact location is flush to 0.004 (0.10) recessed from reference plane. Interface location fixture is pre-set at factory, but can be adjusted to control location.

Cable Group	Part Number
MIL-C-17/151, 0.047 Semi-Rigid	127-0692-101

Tool	Part Number	
Cable Vise	140-0000-962	
Stop Screw	140-0000-981	
Clamp Inserts	140-0000-997	
Body Holder	127-0000-904	
Interface Location Fixture	127-0000-903	

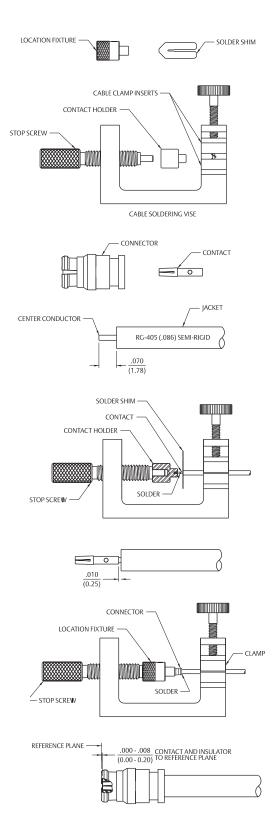


SMP Straight Female Solder Style for 0.086 OD Semi-Rigid Cable

- 1. Identify tools (6 piece parts) and connector parts (2 piece parts).
- 2. Strip cable jacket and dielectric to dimension shown. Do not nick center conductor. Clean all debris from prepared cable.
- 3. Place contact onto center conductor, insert solder shim between cable jacket and contact.
- 4. Insert contact into contact holder fixture and clamp cable in vise. Tighten stop screw until light pressure is applied between contact, solder shim and cable jacket.
- 5. Solder contact to center conductor through solder hole using 0.016 (0.41) diameter flux core solder wire or solder paste. Use a minimum amount of solder and heat for a good joint. Do not allow heat to build up for a long period of time as cable dielectric will expand.
- After solder joint has cooled, remove solder shim and cable from vise. Remove any excess solder from contact with a sharp blade and clean all debris from contact and cable.
- 7. Insert contact into connector assembly, making sure cable jacket bottoms out against internal shoulder of connector body. Insert connector assembly into interface location fixture and clamp cable in vise. Make sure connector assembly is fully engaged within location fixture. Tighten stop screw until light pressure is applied between connector assembly and cable jacket.
- 8. Solder end of connector body to cable jacket, using a minimum amount of solder and heat for a full fillet joint. Allow assembly to cool before removing connector from vise and location fixture. Best results are obtained when contact location is flush to 0.004 (0.10) recessed from reference plane. Interface location fixture is preset at factory, but can be adjusted to control location.

Cable Group	Part Number
RG-405, 0.086 Semi-Rigid	127-0693-001

Tool	Part Number
Cable Vise	140-0000-962
Stop Screw	140-0000-981
Clamp Inserts	140-0000-964
Solder Shim	140-0000-984
Contact Holder	127-0000-902
Interface Location Fixture	127-0000-903

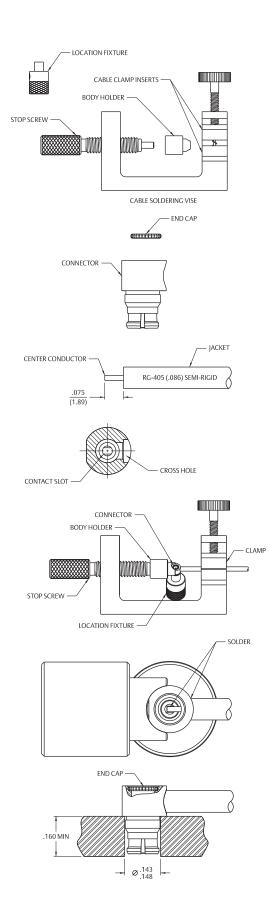


SMP Right Angle Female Solder Style for 0.086 OD Semi-Rigid Cable

- 1. Identify tools (5 piece parts) and connector parts (2 piece parts).
- 2. Strip cable jacket and dielectric to dimension shown. Do not nick center conductor. Clean all debris from prepared cable.
- Make sure slot in connector contact is aligned with cross hole in body as shown. Insert cable into cross hole in connector body, making sure cable jacket bottoms out against internal shoulder of connector body.
- 4. Insert connector assembly into interface location fixture and clamp cable in vise using body holder fixture as shown. Tighten stop screw until light pressure is applied between connector body and cable jacket.
- Solder contact to center conductor through rear access port in connector body using a minimum amount of solder and heat for a good joint. Do not allow solder to build up along exposed center conductor.
- 6. After center conductor solder joint has cooled, solder connector body to cable jacket, using a minimum amount of solder and heat for a full fillet joint. Take care so that solder does not flow onto anti-rock ring or into rear access port. Allow assembly to cool before removing connector from vise and location fixture.
- 7. Using a fixture plate as shown, press end cap into rear access port using a 0.156 (3.96) diameter flat punch untilfully seated within body counter bore.
- Best results are obtained when contact location is flush to 0.004 (0.10) recessed from reference plane. Interface location fixture is preset at factory, but can be adjusted to control location.

Cable Group	Part Number
RG-405, 0.086 Semi-Rigid	127-0693-101

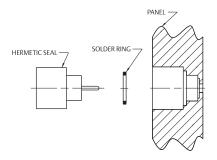
Tool	Part Number	
Cable Vise	140-0000-962	
Stop Screw	140-0000-981	
Clamp Inserts	140-0000-964	
Body Holder	127-0000-904	
Interface Location Fixture	127-0000-903	

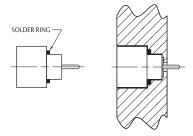


SMP Hermetic Seal Installation

- 1. Prepare housing panel per figure 2 as shown on page 7
- 2. Install solder ring on hermetic seal as shown. Recommended ring size is 0.103 (2.62) ID x 0.128 (3.25) OD x 0.015 (0.38) thick.
- 3. Solder in place as shown

Interface	Part Number	
Full Detent	127-0711-601	
Limited Detent	127-1711-601	
Smooth Bore	127-2711-601	

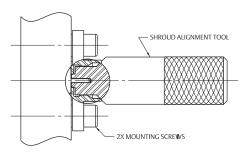




SMP Shroud Installation

- 1. Install appropriate assembly tool into shroud as shown.
- 2. While holding tool in place, align flange mount with mounting holes in panel. Install fasteners and torque to 6-8 in/lbs.

Shroud Part Number	Tool Part Number
127-0701-602	127-0000-905
127-1701-602	127-0000-906
127-2701-602	127-0000-905
127-3701-602	127-0000-905



Introduction

Cinch Connectivity Solutions offers the Johnson line of SMPM connectors. The sub-miniature, push-on style micro interfaces are distinguished for blind mating and for their size (about 35% smaller than the SMP design) and becoming increasingly popular for the two-fold design benefit of allowing for a higher-density of connection points and maintaining solid Return Loss performance from DC-level frequencies up to 65GHz.

The Johnson SMPM family includes PC mount and End Launch styles, straight and right-angled, 0.047 cabled connectors and sealable flange mounts. All male connectors are offered as full detent or smooth bore designs for your preference of separation forces. Detent features are provided to retain the push-on connectors in mated condition. Different levels of engage and disengage forces are

accomplished by various Detent offerings in the shroud housing.

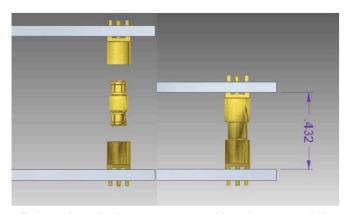
The SMPM bullet adapter provides the same coveted blind mate functionality as the larger SMP size connectors, mitigating radial and axial misalignment with negligible change to VSWR and other signal losses. The SMPM-series is perfect for use in test equipment and racked-electronics where footprint space is a premium and mating boards together is difficult.

For those systems with even tighter tolerance restrictions on center to center spacing, multi-channel blocks for straight or right-angle interfaces can be designed and quoted through Cinch Connectivity Solutions responsive product design team.

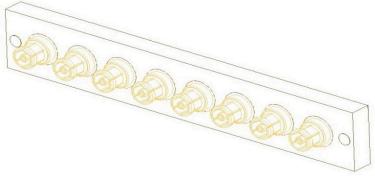
Key Features & Benefits

- 35% smaller than SMP connectors
- DC-65GHz
- Bullet adapter provides blind mate capabilities
- · Excellent electrical performance with axial and radial misalignment
- Available in PC mount, end launch and cabled styles





Estimated spacing between two mated boards connected via PC mount and bullet adapters



8 Port Connector Block

SMPM PRODUCT FAMILY

Straight PC mount, female



Gold Plated

125-0801-201

Straight PC mount male, full detent



Gold Plated

125-0701-201

Straight PC mount male, smooth bore



Gold Plated

125-2701-201

Male PCB SMT 0.150" height, full detent



Gold Plated

125-0701-211

Male PCB SMT 0.113" height, full detent



Gold Plated

125-2701-201

End launch male, full detent



Gold Plated

125-0701-801

End launch male, smooth bore

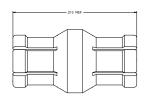


Gold Plated

125-2701-801

Bullet adapter, 0.210" Length





Gold Plated	VSWR & Frequency Range
125-0901-811	1.15 Max 18GHz,
	1.25 Max 40GHz,
	1.45 Max 65GHz

Bullet adapter, 0.256" Length



Gold Plated

125-0901-801

Straight male for 0.047" semi-rigid cable, full detent



Gold Plated

125-0592-001

Straight male for 0.047" semi-rigid cable, smooth bore

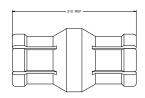


Gold Plated

125-2592-001

Straight male for 0.086" semi-rigid cable, full detent





Gold Plated	VSWR & Frequency Range
125-0593-001	1.15 Max 18GHz,
	1.25 Max 40GHz,
	1.45 Max 65GHz

Right angle male for 0.086" semi-rigid cable, full detent



Gold Plated

125-0593-101

Straight female for 0.047" cable



Gold Plated

125-0692-001

Low profile right-angled female for 0.047" cable, full detent



Gold Plated

125-0692-111

2-hole flange mount male shroud, full detent



Gold Plated

125-0701-602

2-hole flange mount male shroud, smooth bore



Gold Plated

125-2701-602

Hermetic seal feed-thru



Gold Plated

142-1000-041

SMPM PRODUCT FAMILY

SMPM extraction tool for cabled connectors



Gold Plated

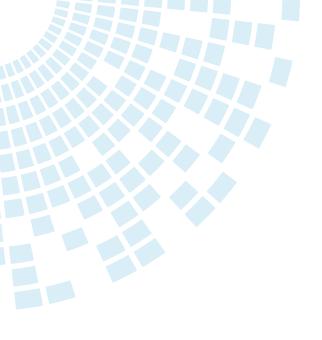
125-0000-900

SMPM bullet adapter installation/extraction tool



Gold Plated

125-0000-901



About Cinch Connectivity Solutions

For over 100 years, Cinch Connectivity Solutions has manufactured high-quality and reliable high-performance connectors and cable assemblies. Cinch is recognized as a world class connectivity supplier of RF, fiber optic, hybrid, microwave components, circular, d-subminiatures, modular rectangular, electronic enclosures and cable assemblies.

Cinch provides innovative solutions to the military, commercial aerospace, networking, telecommunication, test and measurement, oil and gas and other harsh environment industries.



For more information, please contact us:

North America +1 507.833.8822 ccsorders@us.cinch.com

Asia-Pacific +86 21 5442 7668 ccs.asia.sales@as.cinch.com

Europe, Middle East +44 (0) 1245 342060 CinchConnectivity@eu.cinch.com

belfuse.com/cinch.com



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Crimpers / Crimping Tools category:

Click to view products by Bel Fuse manufacturer:

Other Similar products are found below:

010-0096 M225201-06 M225202-37 6-1579015-5 CT150-6-RH07 622-6441LF M322 6-304052-1 63456-0054 63484-3701 63800-8355 63819-1875 63819-2875 63819-4475 63827-5375 64001-0975 64001-4175 64005-0175 662903-2 690602-6 7-1579001-9 7-23471-1 762637-1 808714-1 811242-5 999-50-020083 1-21002-3 1-21002-7 12085270 1-21002-6 1-21113-6 1-22548-4 125442-1 DCE.91.073.BVC DCE.91.090.3MVM DCE.91.130.5MVU DCE.91.202.BVCM 1338300-1 1-354003-0 1338301-1 DF62/RE-MD 142321 1456088-1 1490794-1 1-45804-6 1490357-2 1490357-3 AX100749 1-59619-7 1596970-1