

SMP Interconnect Series



INTRODUCTION

Carlisle Interconnect Technologies launched the SMP “push-on” connector product line two decades ago to facilitate dense packaging within RF/Microwave systems. The SMP interface has enabled design engineers to increase performance and complexity of their designs and improve upon their form factor.

The SMP interconnect series relies on a floating female-to-female adapter—commonly referred to as a “bullet”—to enable stacking of boards equipped with an SMP male PCB connector. This durable construction and ability to tolerate radial and axial misalignment allows for a blindmate interconnect solution. SMP connectors can also withstand multiple engagement/disengagement cycles without degradation in electrical performance.

The success of the SMP product line has spurred the development and commercialization of other blindmate interconnect systems – namely the SSMP®, TMP® and WMP® to facilitate rapid assembly and testing for the gamut of Military and Commercial RF/Microwave applications.

MATERIALS & FINISH

Metal	Specification
BeCu (Beryllium Copper)	ASTM B 196 and/or ASTM B 197
Brass	ASTM B 36, B121, B16, B16M
Stainless Steel	ASTM A484/ A582 or A555/581
Iron-Nickel-Cobalt	ASTM F-15
Dielectric	Specification
Virgin PTFE Fluorocarbon	ASTM D 1710 and ASTM D 1457
Polyamide-imide	ASTM D5204 Group 2 Class 1
Glass	Corning 7070 or Equivalent
Finish	Specification
Gold (75u in. Typ)	ASTM-B488 Type 1, Class 1.25
Nickel (100u in. Typ)	SAE AMS-QQ-N-290
Passivation	ASTM A967

FEATURES

- » Frequency Range: DC - 40 GHz
- » 50 Ω Impedance; Blindmateable configuration
- » Industry standard per MIL-STD-348
- » MIL-PRF-39012 compliant
- » Ability to withstand Radial/Axial Misalignment
- » Board-mount, field-replaceable, bullets, hermetic and cable connector configurations
- » Custom connectors available

SPECIFICATIONS

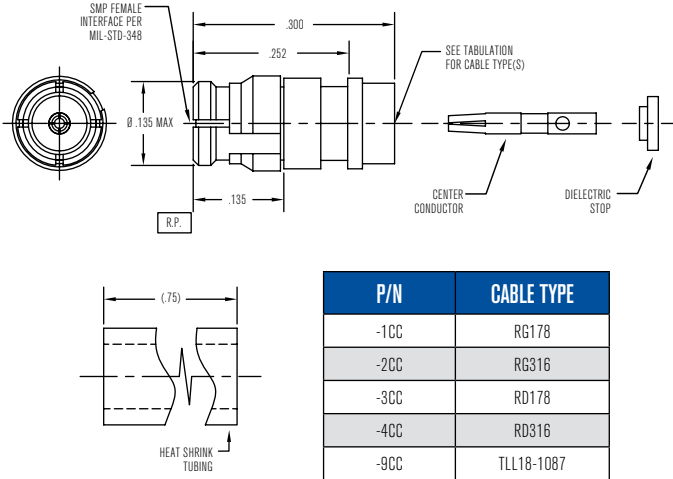
Parameter	Specification	
Impedance	50 Ω	
Frequency Range	DC - 40 GHz	
VSWR	DC - 26 GHz: 1.15 : 1 (max) 26 - 40 GHz: 1.40:1 (max)	
Insertion Loss	0.1 x √ f (GHz)	
DWV @ Sea Level	500 Vrms	
Insulation Resistance	5000 MΩ (min)	
RF High Pot	325 Vrms @ 5 MHz	
Force to Engage	Full Detent	15 lbs typical
	Limited Detent	7 lbs typical
	Smooth Bore	2 lbs typical
Force to Disengage	Full Detent	5 lbs typical
	Limited Detent	3 lbs typical
	Smooth Bore	0.5 lbs typical
Radial Misalignment	+/- .020 inches*	
Axial Misalignment	.010 inches	
Temperature Range	-55° C to +165° C	
Thermal Shock	MIL-STD-202, Method 107, Cond B	
Moisture Resistance	MIL-STD-202, Method 106, except step 7b	
Corrosion	MIL-STD-202, Method 101, Cond B	
Vibration	MIL-STD-202, Method 204, Cond D	
Shock	MIL-STD-202, Method 213, Cond I	

*When mated to a Catcher's Mitt interface

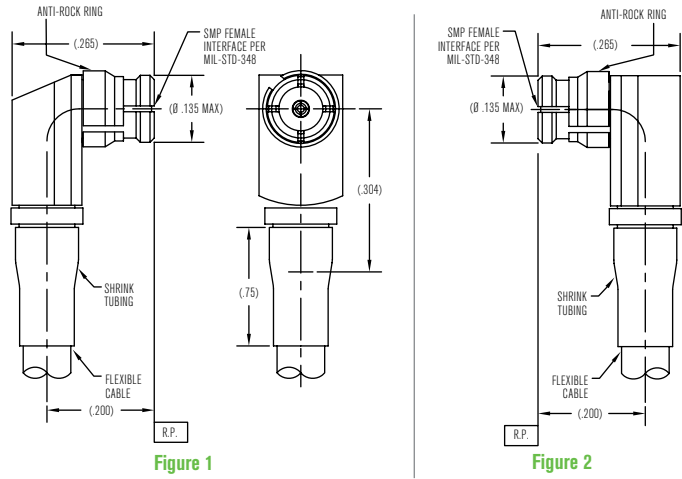
SMP Configurations

CABLE CONNECTORS - FOR FLEXIBLE CABLES

SMP Female Straight Connector for Flexible Cables / P657

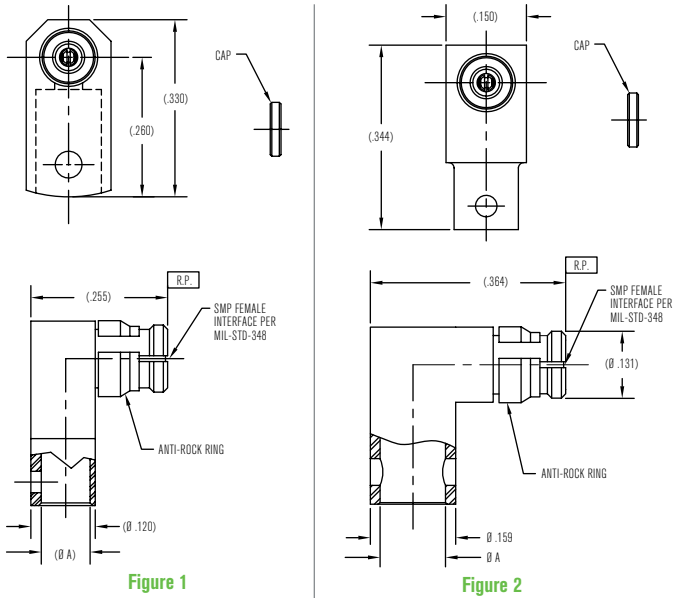


SMP Female Right Angle Connector for Flexible Cables, 26.5 GHz / P601



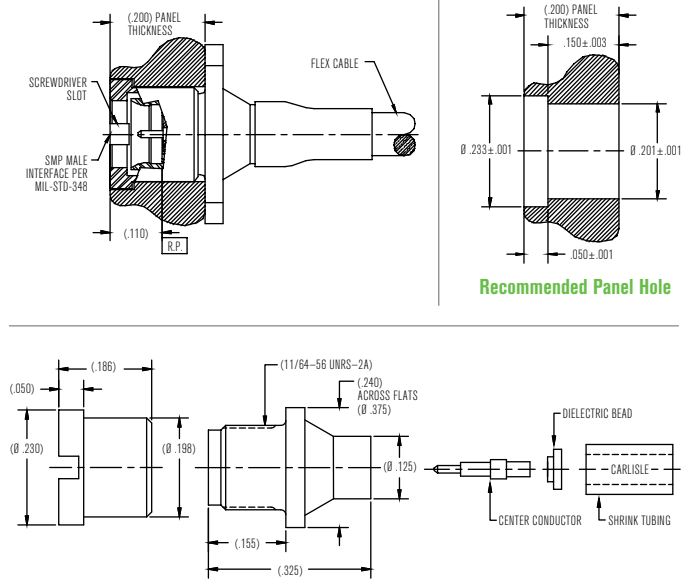
P/N	(Ø A)	CABLE TYPE	FIGURE
-9CC	(.090)	TLL18-1087	1
-11CC	(.122)	TLL40-1111A	2

SMP Female Right Angle Connector for Flexible Cables, 18 GHz / P600



P/N	(Ø A)	CABLE TYPE	FIGURE
-9CC	(.090)	TLL18-1087	1
-11CC	(.122)	TLL40-1111A	2

SMP Male Straight Panel Mount Connector for Flexible Cables / P663



P/N	CABLE TYPE	INTERFACE
-1CC	M17/93-RG178 (OR EQUIVALENT)	CATCHER'S MITT
-2CC	RD178 (OR EQUIVALENT)	CATCHER'S MITT
-3CC	M17/113-RG316 (OR EQUIVALENT)	CATCHER'S MITT
-4CC	RD316 (OR EQUIVALENT)	CATCHER'S MITT
-5CC	M17/93-RG178 (OR EQUIVALENT)	LIMITED DETENT
-6CC	RD178 (OR EQUIVALENT)	LIMITED DETENT

P/N	CABLE TYPE	INTERFACE
-7CC	M17/113-RG316 (OR EQUIVALENT)	LIMITED DETENT
-8CC	RD316 (OR EQUIVALENT)	LIMITED DETENT
-9CC	M17/93-RG178 (OR EQUIVALENT)	FULL DETENT
-10CC	RD178 (OR EQUIVALENT)	FULL DETENT
-11CC	M17/113-RG316 (OR EQUIVALENT)	FULL DETENT
-12CC	RD316 (OR EQUIVALENT)	FULL DETENT

CABLE CONNECTORS - FOR SEMI-RIGID & SEMI-FLEX CABLES

SMP Female Straight Connector for Semi-Rigid and Semi-Flex Cables / P651

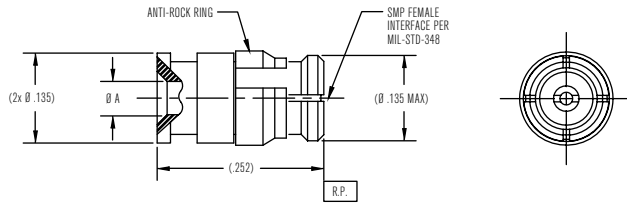


Figure 1

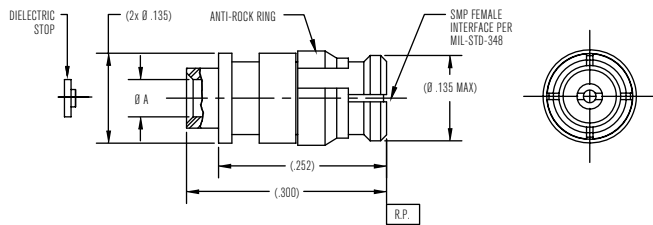
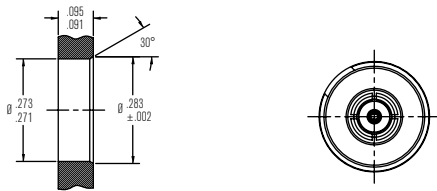


Figure 2

P/N	CABLE TYPE	(Ø A)	FIGURE
-1CC	Ø .047 SEMI-RIGID CABLE	.049 MIN	2
-2CC	Ø .085 SEMI-RIGID CABLE	.085 MIN	1
-3CC	Ø .047 MICROPOROUS CABLE	.047 MIN	2
-4CC	Ø .085 MICROPOROUS CABLE	.085 MIN	1

SMP Female Float Mount Connector for Semi-Rigid and Semi-Flex Cables / P658



Recommended Mounting Panel

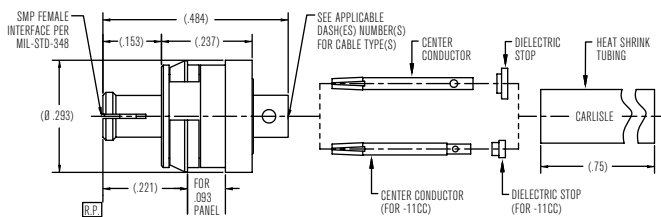


Figure 1

SMP Female Float Mount Connector for Semi-Rigid and Semi-Flex Cables / P658 (Continued)

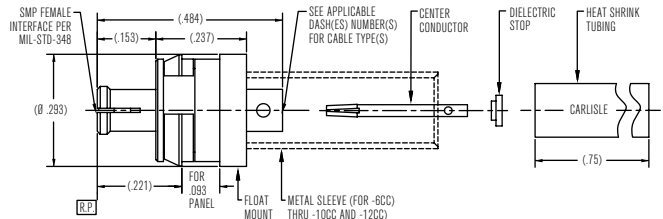
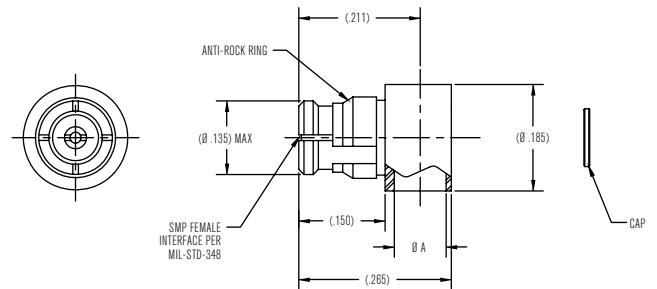


Figure 2

P/N	CABLE TYPE	FIGURE
-1CC	UFF Ø .092A	1
-2CC	M17/113-RG316	
-3CC	TLL40-1087	
-4CC	MICROFLEX Ø .095	
-5CC	Ø .085 SEMI-RIGID	
-6CC	UFF Ø .092A	2
-7CC	M17/113-RG316	
-8CC	TLL40-1087	
-9CC	MICROFLEX Ø .095	
-10CC	Ø .085 SEMI-RIGID	
-11CC	Ø .047 SEMI-RIGID	1
-12CC	Ø .047 SEMI-RIGID	2

SMP Female Right Angle for Semi-Rigid and Semi-Flex Cables, 12 GHz / P652

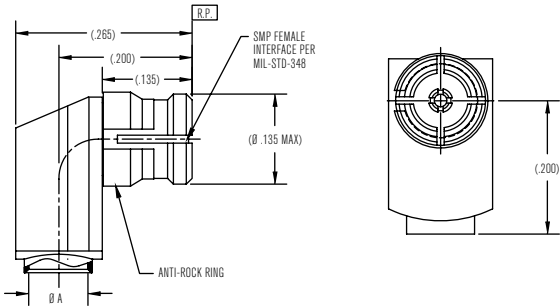


P/N	Ø A	CABLE TYPE
-1CC	.049 MIN	.047 SEMI-RIGID
-2CC	.088 MIN	.085 SEMI-RIGID
-3CC	.049 MIN	.047 MICROPOROUS
-4CC	.088 MIN	.085 MICROPOROUS

SMP Configurations

CABLE CONNECTORS - FOR SEMI-RIGID & SEMI-FLEX CABLES (CONT.)

SMP Female Right Angle for Semi-Rigid and Semi-Flex Cables, 26.5 GHz / P655



P/N	Ø A	CABLE TYPE
-1CC	.049 MIN	.047 SEMI-RIGID
-2CC	.088 MIN	.085 SEMI-RIGID
-3CC	.049 MIN	.047 MICROPOROUS
-4CC	.088 MIN	.085 MICROPOROUS

SMP Female Right Angle for Semi-Rigid and Semi-Flex Cables, 18 GHz / P659

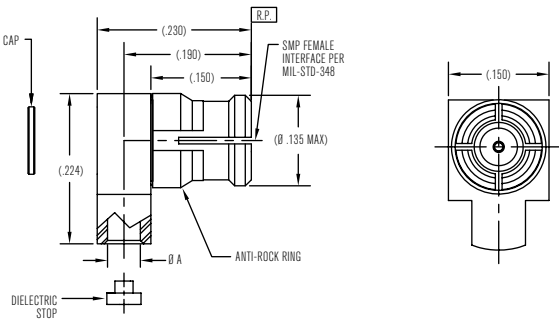


Figure 1

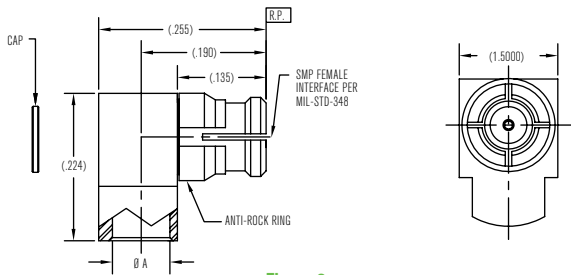
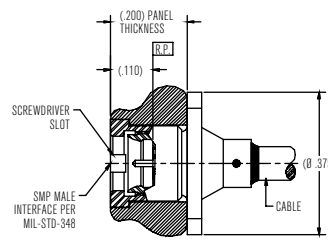
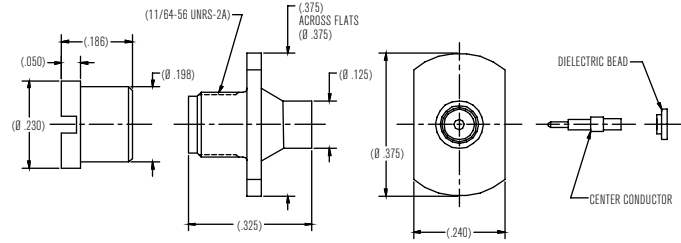


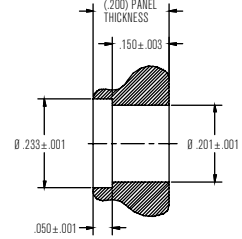
Figure 2

P/N	Ø A	CABLE TYPE	FIGURE
-1CC	.049 MIN	Ø .047 SEMI-RIGID	1
-2CC	.088 MIN	Ø .085 SEMI-RIGID	2
-3CC	.049 MIN	Ø .047 MICROPOROUS	1
-4CC	.088 MIN	Ø .085 MICROPOROUS	2

SMP Male Bulkhead Panel Mount Connector for Semi-Rigid Cables / P662



Installed View



Recommended Panel Hole

P/N	CABLE TYPE	INTERFACE
-1CC	Ø .047 S/R	CATCHER'S MITT
-2CC	Ø .085 S/R	CATCHER'S MITT
-3CC	Ø .047 L/L	CATCHER'S MITT
-4CC	Ø .085 L/L	CATCHER'S MITT
-5CC	Ø .047 S/R	FULL DETENT
-6CC	Ø .085 S/R	FULL DETENT
-7CC	Ø .047 L/L	FULL DETENT
-8CC	Ø .085 L/L	FULL DETENT
-9CC	Ø .047 S/R	LIMITED DETENT
-10CC	Ø .085 S/R	LIMITED DETENT
-11CC	Ø .047 L/L	LIMITED DETENT
-12CC	Ø .085 L/L	LIMITED DETENT
-13CC	Ø .085 S/R	LIMITED DETENT / CATCHER'S MITT

PCB CONNECTORS - THROUGH HOLE BOARD MOUNT

SMP Male PCB Mount to a Straight Termination / P654

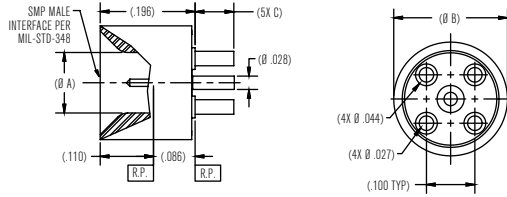


Figure 1

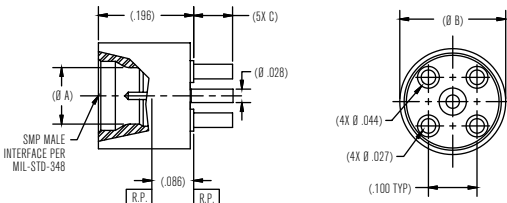
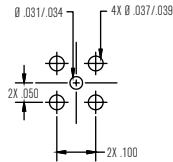


Figure 2



Recommended Mounting Hole Pattern

P/N	INTERFACE	(Ø A)	(Ø B)	(C)	FIGURE
-1CC	LIMITED DETENT	.120	(.218)	.079	2
-2CC	FULL DETENT	.116	(.218)	.079	2
-3CC	SMOOTH BORE	.125	(.218)	.079	2
-4CC	CATCHER'S MITT	.125	(.235)	.079	1
-5CC	FULL DETENT	.116	(.218)	.100	2
-6CC	LIMITED DETENT	.120	(.218)	.100	2
-7CC	SMOOTH BORE	.125	(.218)	.100	2
-8CC	CATCHER'S MITT	.125	(.235)	.100	1
-9CC	FULL DETENT	.116	(.218)	.140	2
-10CC	LIMITED DETENT	.120	(.218)	.140	2
-11CC	SMOOTH BORE	.125	(.218)	.140	2
-12CC	CATCHER'S MITT	.125	(.235)	.140	1

SMP Male Straight PCB Mount - Square Body / P603

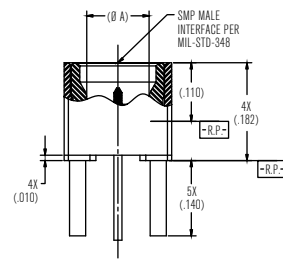


Figure 1

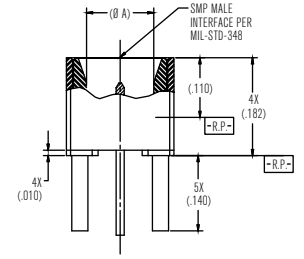
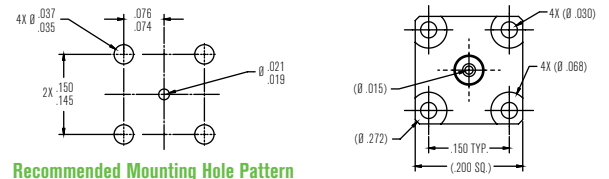


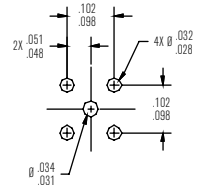
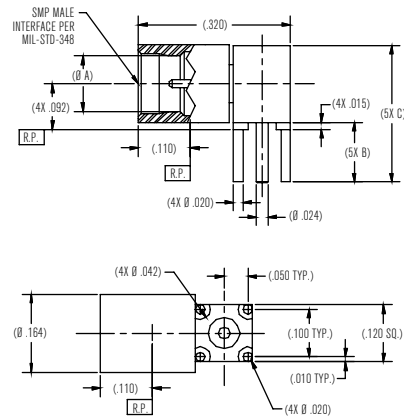
Figure 2



Recommended Mounting Hole Pattern

P/N	INTERFACE	(Ø A)	FIGURE
-1CC	FULL DETENT	.116	1
-2CC	LIMITED DETENT	.120	1
-3CC	SMOOTH BORE	.125	1
-4CC	CATCHER'S MITT	.125	2

SMP Male Right Angle PCB Mount / P646



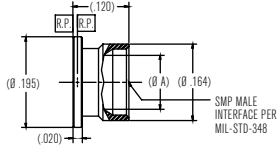
Recommended Mounting Hole Pattern

P/N	INTERFACE	(Ø A)	(Ø B)	(C)
-1CC	FULL DETENT	.116	.125	.287
-2CC	FULL DETENT	.116	.115	.297
-3CC	FULL DETENT	.116	.155	.337

SMP Configurations

PCB CONNECTORS - SURFACE MOUNT

SMP Shroud Solder-In Surface Mount - Short Body / P677



P/N	INTERFACE	(Ø A)
-1	FULL DETENT	.116
-2	LIMITED DETENT	.120
-3	SMOOTH BORE	.125

SMP Male Straight Surface Mount / P703

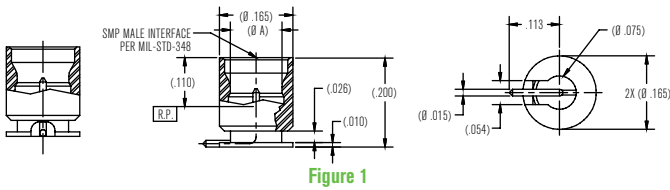


Figure 1

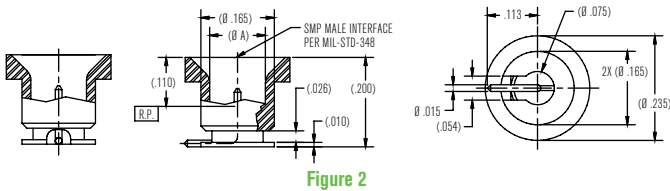
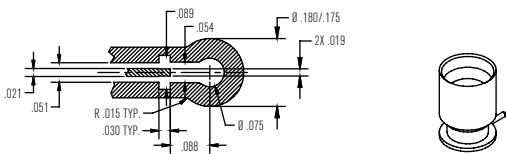


Figure 2



Mounting Hole Pattern

Dimensions shown are for Rogers 4350 PCB Material. These dimensions may vary depending on PCB material used.

P/N	INTERFACE	(Ø A)	FIGURE
-1CC	FULL DETENT	(.116)	1
-2CC	LIMITED DETENT	(.120)	1
-3CC	SMOOTH BORE	(.125)	1
-4CC	CATCHER'S MITT	(.125)	2



P703-1CC

SMP Male Straight to Surface Mount with Posts / P797

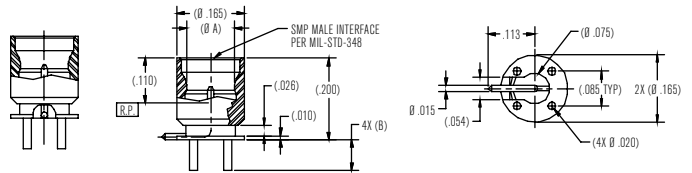


Figure 1

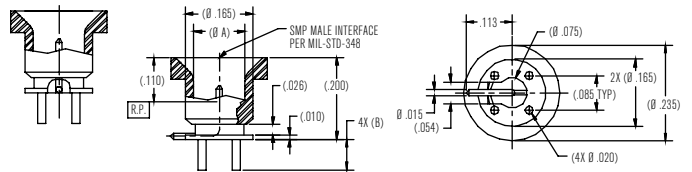
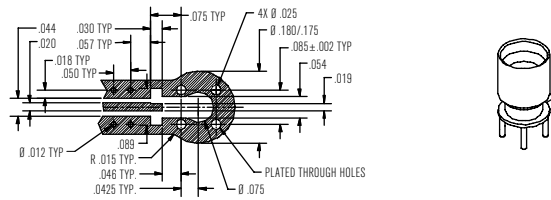


Figure 2

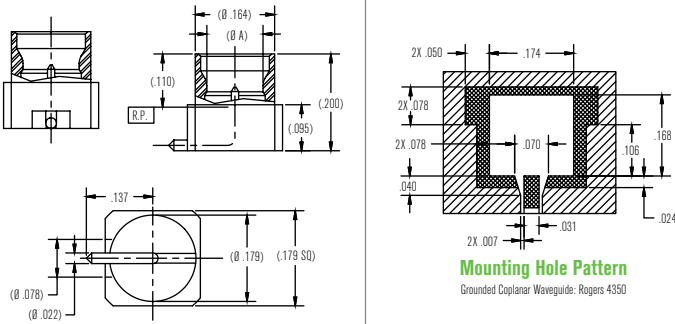


Mounting Hole Pattern

Dimensions shown are for Rogers 4350 PCB Material. These dimensions may vary depending on PCB material used.

P/N	INTERFACE	(Ø A)	(B)	FIGURE
-1CC	FULL DETENT	(.116)	.075	1
-2CC	LIMITED DETENT	(.120)	.075	1
-3CC	SMOOTH BORE	(.125)	.075	1
-4CC	CATCHER'S MITT	(.125)	.075	2
-5CC	FULL DETENT	(.116)	.140	1
-6CC	LIMITED DETENT	(.120)	.140	1
-7CC	SMOOTH BORE	(.125)	.140	1
-8CC	CATCHER'S MITT	(.125)	.140	2

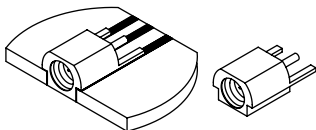
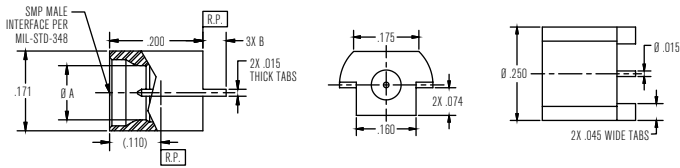
SMP Male Straight Surface Mount / P839



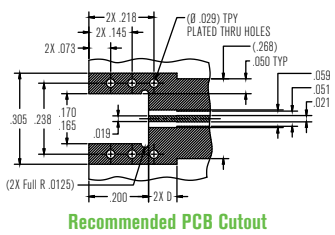
P/N	INTERFACE	(Ø A)
-1CC	FULL DETENT	.116
-2CC	LIMITED DETENT	.120
-3CC	SMOOTH BORE	.125

PCB CONNECTORS - EDGE MOUNT

SMP Male Straight Edge Mount Connector / P606

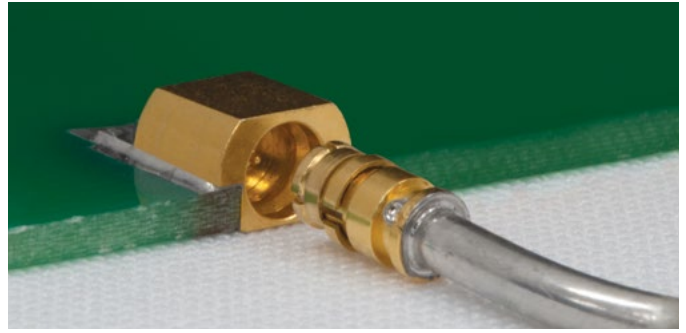


PCB Mount Detail



Recommended PCB Cutout

P/N	INTERFACE	Ø A	B	C
-1CC	FULL DETENT	.116	.090	.095
-2CC	LIMITED DETENT	.120	.090	.095
-3CC	SMOOTH BORE	.125	.090	.095
-4CC	FULL DETENT	.116	.050	.055
-5CC	LIMITED DETENT	.120	.050	.055
-6CC	SMOOTH BORE	.125	.050	.055



PC Board Edge Mount - P606

SMP Male Straight Edge Mount Connector / P698

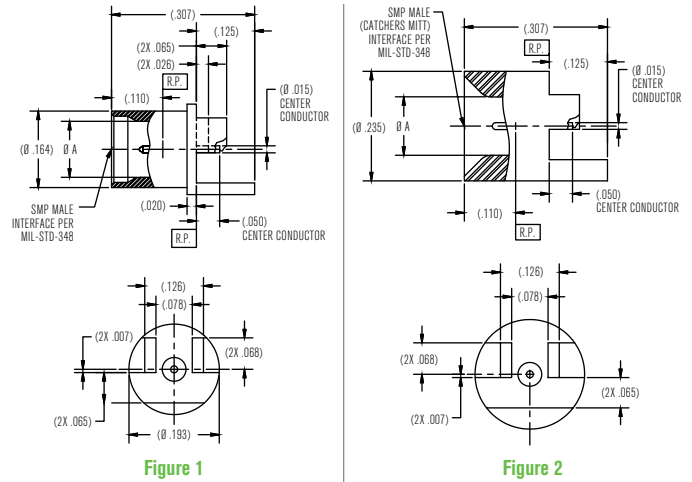
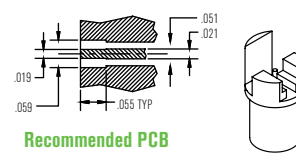


Figure 1

Figure 2



Recommended PCB Mounting Pattern

P/N	INTERFACE	(Ø A)	FIGURE
-1CC	FULL DETENT	(.116)	1
-2CC	LIMITED DETENT	(.120)	1
-3CC	SMOOTH BORE	(.125)	1
-4CC	CATCHER'S MITT	(.125)	2

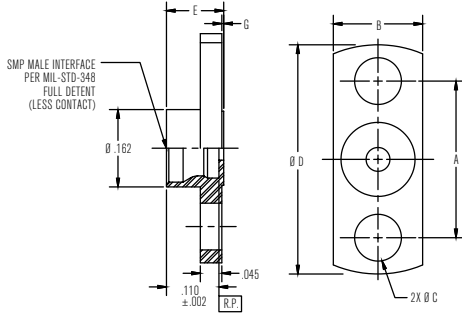


P698-2CC

SMP Configurations

SHROUDS - FLANGE MOUNT

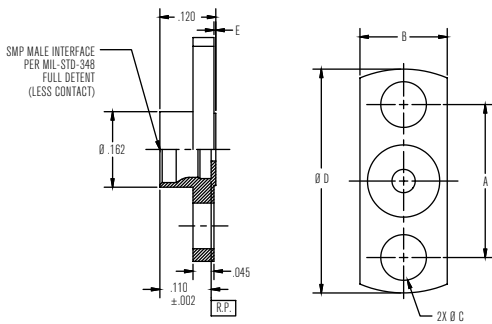
SMP Shroud - Full Detent Straight 2-Hole Flange Mount / P670



P/N	A	B	Ø C	Ø D	E	F	G
-1SF	.328	.187	.098	.480	.120	.045	.004
-2SF	.481	.223	.102	.625	.120	.045	.002
-3SF	.282	.165	.073	.400	.120	.045	.002
-4SF	.400	.186	.103	.550	.120	.045	.004
-5SF	.282	.165	.073	.400	.120	.045	.005
-6SF	.282	.165	*	.400	.120	.045	.005
-7SF	NR	NR	NR	.625	.120	.075	.003
-8SF	.481	.223	.102	.625	.120	.045	.004
-8	.481	.223	.102	.625	.120	.045	.004
-9SF	.282	.165	.073	.400	.120	.045	.004
-10SF	.328	.187	.098	.480	.120	.045	.005

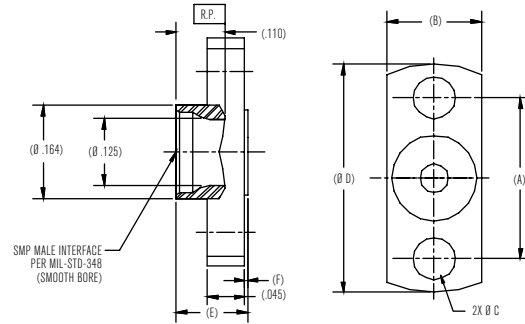
* 2X #0-80 UNF-2B X Ø .085 X 90° Countersunk

SMP Shroud - Limited Detent Straight 2-Hole Flange Mount / P672



P/N	A	B	Ø C	Ø D	E
-1SF	.328	.187	.098	.480	.004
-2SF	.481	.223	.102	.625	.004
-3SF	.282	.165	.073	.400	.002
-4SF	.400	.186	.103	.550	.004

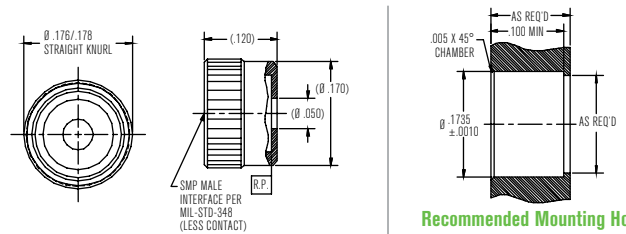
SMP Shroud - Smooth Bore Straight 2-Hole Flange Mount / P673



P/N	(A)	(B)	(Ø C)	(Ø D)	(E)	(F)
-1SF	.328	.187	.098	.480	.120	.004
-2SF	.481	.223	.102	.625	.120	.002
-3SF	.282	.165	.073	.400	.120	.002

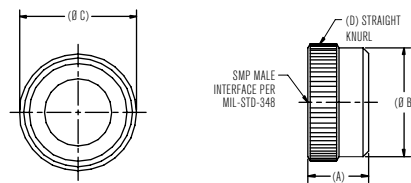
SHROUDS - PRESS-IN

SMP Press-In Shroud / P675



P/N	INTERFACE
-1SF	FULL DETENT
-2SF	LIMITED DETENT
-3SF	SMOOTH BORE

SMP Press-In Shroud - Short Body / P679



P/N	(A)	(Ø B)	(Ø C)	(D)
-1SF	.080	.143	.154	50P
-2SF	.120	.163	.174	50P
-3SF	.115	.163	.184	128P

SHROUDS - THREAD-IN

SMP Shroud - Thread-In / P676

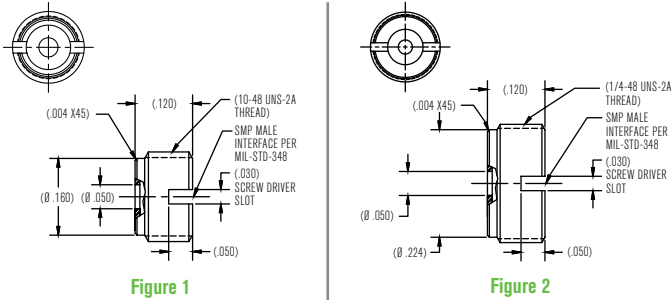


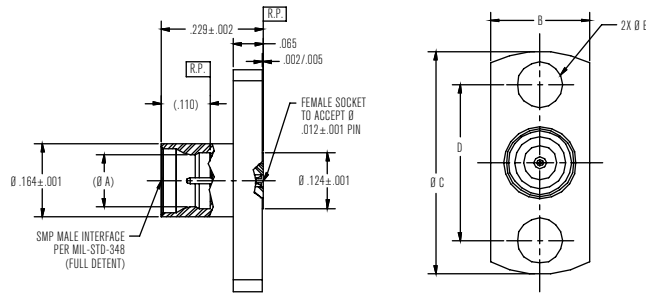
Figure 1

Figure 2

P/N	INTERFACE	FIGURE
-1SF	FULL DETENT	1
-2SF	LIMITED DETENT	1
-3SF	SMOOTH BORE	1
-4SF	CATCHER'S MITT	2

SHROUDS - FIELD-REPLACEABLE

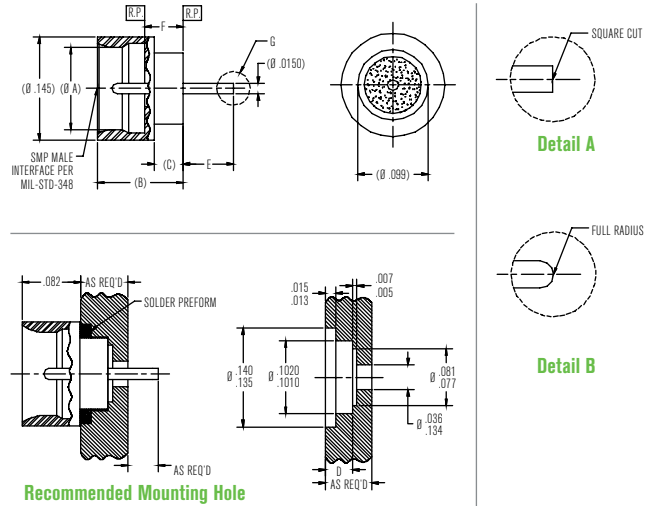
SMP Male 2-Hole Flange Mount (Accepts 0.012" Pin) / P836



P/N	INTERFACE	A	B	Ø C	D	Ø E
-1CC	FULL DETENT	(.116)	.165	.625	.481±.002	.078
-1CCSF						
-2CC	LIMITED DETENT	(.120)	.223	.485	.350±.002	.102
-2CCSF						
-3CC	SMOOTH BORE	(.125)				
-3CCSF						
-4CC	FULL DETENT	(.116)				
-4CCSF						
-5CC	LIMITED DETENT	(.120)				
-5CCSF						
-6CC	SMOOTH BORE	(.125)				
-6CCSF						
-7CC	FULL DETENT	(.116)				
-7CCSF						
-8CC	LIMITED DETENT	(.120)				
-8CCSF						
-9CC	SMOOTH BORE	(.125)				
-9CCSF						

HERMETICS

SMP Male Hermetic Shroud - Short Body / P680



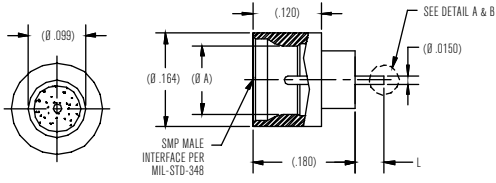
Recommended Mounting Hole

P/N	INTERFACE	(Ø A)	(B)	(C)	D	E	F	G	
-1CC	FULL DETENT	.116	.120	.040	.037/.039	.050	.050±.001	SEE DETAIL A	
-2CC	LIMITED DETENT	.120	.120	.040	.037/.039	.050	.050±.001		
-3CC	SMOOTH BORE	.125	.120	.040	.037/.039	.050	.050±.001		
-4CC	FULL DETENT	.116	.120	.040	.037/.039	.050	.050±.001		
-5CC	LIMITED DETENT	.120	.120	.040	.037/.039	.050	.050±.001		
-6CC	SMOOTH BORE	.125	.120	.040	.037/.039	.050	.050±.001		
-10CC	FULL DETENT	.116	.120	.040	.037/.039	.070	.050±.001		
-11CC	LIMITED DETENT	.120	.120	.040	.037/.039	.070	.050±.001		
-12CC	SMOOTH BORE	.125	.120	.040	.037/.039	.070	.050±.001		
-13CC	FULL DETENT	.116	.120	.040	.037/.039	.090	.050±.001		
-14CC	LIMITED DETENT	.120	.120	.040	.037/.039	.090	.050±.001		
-15CC	SMOOTH BORE	.125	.120	.040	.037/.039	.090	.050±.001		
-22CC	FULL DETENT	.116	.120	.040	.037/.039	.050	.050±.001		SEE DETAIL B
-23CC	LIMITED DETENT	.120	.120	.040	.037/.039	.050	.050±.001		
-24CC	SMOOTH BORE	.125	.120	.040	.037/.039	.050	.050±.001		
-25CC	FULL DETENT	.116	.120	.040	.037/.039	.070	.050±.001		
-26CC	LIMITED DETENT	.120	.120	.040	.037/.039	.070	.050±.001		
-27CC	SMOOTH BORE	.125	.120	.040	.037/.039	.070	.050±.001		
-28CC	FULL DETENT	.116	.120	.040	.037/.039	.090	.050±.001		
-29CC	LIMITED DETENT	.120	.120	.040	.037/.039	.090	.050±.001		
-30CC	SMOOTH BORE	.125	.120	.040	.037/.039	.090	.050±.001		

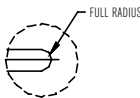
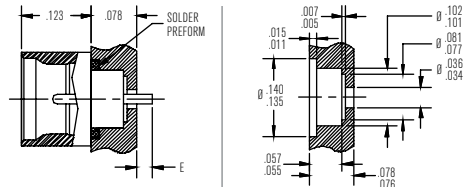
SMP Configurations

HERMETICS (CONT.)

SMP Male Hermetic Shroud / P682



Detail A



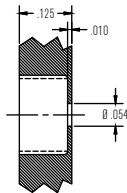
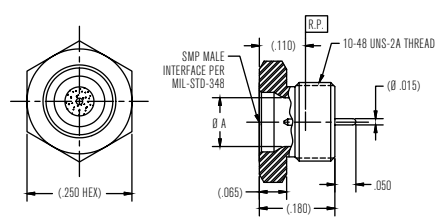
Detail B

Installation View

Recommended Mounting Hole

P/N	INTERFACE	(Ø A)	L	E	DETAIL
-1CC	FULL DETENT	.116	.050	.030	A
-2CC	LIMITED DETENT	.120	.050	.030	A
-3CC	SMOOTH BORE	.125	.050	.030	A
-4CC	FULL DETENT	.116	.240	.220	B
-5CC	LIMITED DETENT	.120	.240	.220	B
-6CC	SMOOTH BORE	.125	.240	.220	B

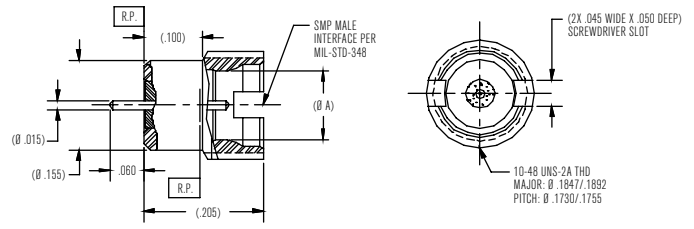
SMP Male Hermetic Thread-In with Mounting Nut / P683



Recommended Mounting Hole

P/N	INTERFACE	(Ø A)
-1CC	FULL DETENT	(.116)
-2CC	LIMITED DETENT	(.120)
-3CC	SMOOTH BORE	(.125)

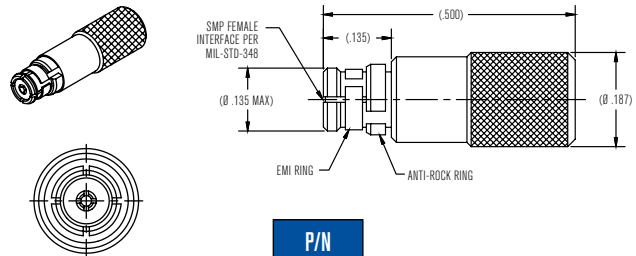
SMP Male Hermetic Thread-In / P761



P/N	INTERFACE	(Ø A)
-1CC	LIMITED DETENT	(.120)
-2CC	FULL DETENT	(.116)

OPEN/SHORTS/LOADS

SMP Female 50 Ohm Termination / P918

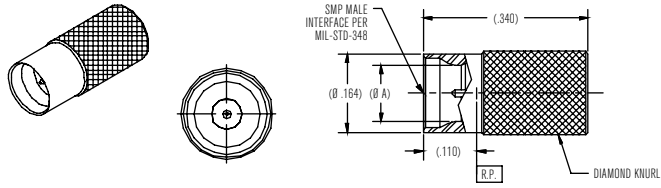


P/N
-1CC



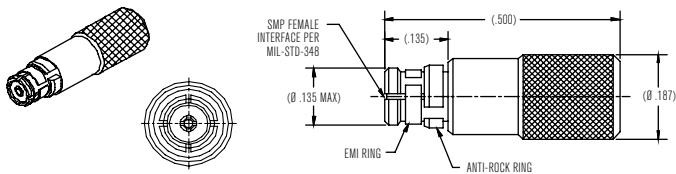
P918-1CC

SMP Male 50 Ohm Termination / P919

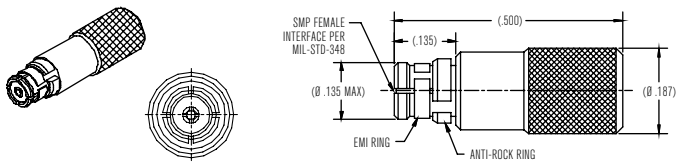


P/N	INTERFACE	(Ø A)
-1CCSF	FULL DETENT	.116
-2CCSF	LIMITED DETENT	.120
-3CCSF	SMOOTH BORE	.125

SMP Female Short / P930-1CC



SMP Female Open / P931-1



BULLETS/ADAPTERS

SMP Female to SMP Female Bullet / P617

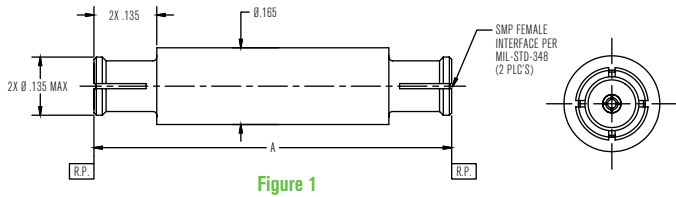


Figure 1

SMP Female to SMP Female Bullet / P617 (Continued)

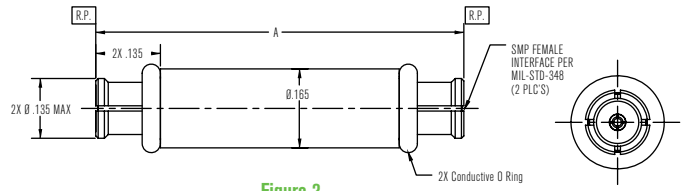


Figure 2

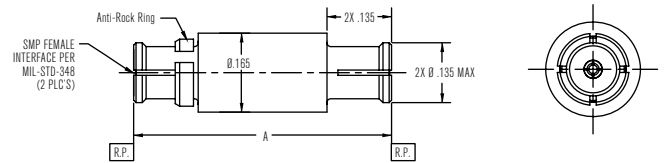


Figure 3

P/N	A	FIGURE
-1CC	.768/.770	1
-2CC	.850/.852	1
-3CC	1.365/1.367	1
-4CC	.438/.441	2
-5CC	.768/.770	2

P/N	A	FIGURE
-6CC	.414/.416	1
-7CC	.427/.429	1
-8CC	.538/.540	3
-9CC	.528/.530	3

SMP Female to SMP Female Bullet - Short Body / P650

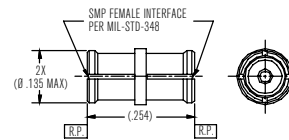


Figure 1

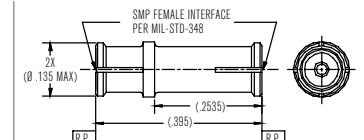


Figure 3

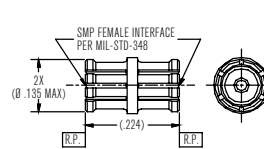


Figure 2

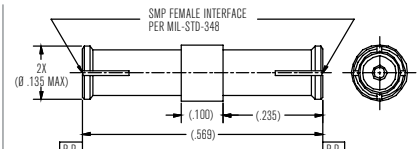


Figure 4

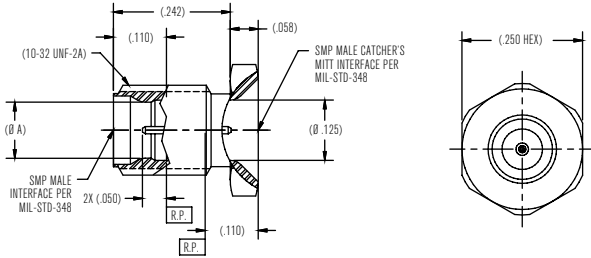
P/N	FIGURE
-1CC	1
-2CC	2

P/N	FIGURE
-3CC	3
-4CC	4

SMP Configurations

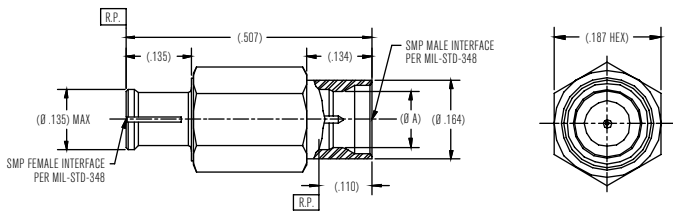
BULLETS/ADAPTERS (CONT.)

SMP Male Bulkhead to SMP Male Catcher's Mitt / P912



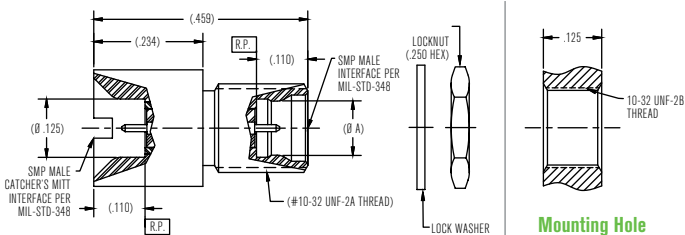
P/N	INTERFACE	(Ø A)
-1CCSF	FULL DETENT	.116
-2CCSF	LIMITED DETENT	.120
-3CCSF	SMOOTH BORE	.125

SMP Male to SMP Female Adapter / P914



P/N	INTERFACE	(Ø A)
-1CCSF	FULL DETENT	.116
-2CCSF	LIMITED DETENT	.120
-3CCSF	SMOOTH BORE	.125

SMP Male to SMP Female Catcher's Mitt / P916



Mounting Hole Pattern

P/N	INTERFACE	(Ø A)
-1CCSF	FULL DETENT	.116
-2CCSF	LIMITED DETENT	.120
-3CCSF	SMOOTH BORE	.125

SMP Female to SMP Female Spring Loaded Bullet / P922

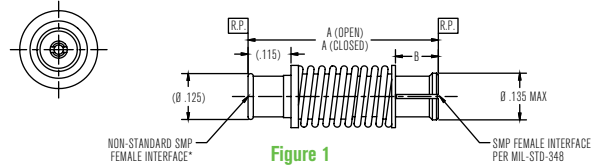


Figure 1

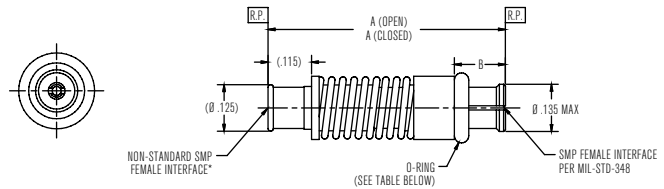


Figure 2

* FOR USE WITH SMOOTH BORE AND CATCHER'S MITT INTERFACES ONLY

P/N	FIGURE	A (OPEN)	A (CLOSED)	B	O-RING	SPRING PRE-LOAD	SPRING RATE
-2CC	1	.510	.460	.115	NOT REQ'D	1.95 LBS	15.0 LBS/IN
-3CC	2	.745	.695	.115	NOT REQ'D	1.21 LBS	5.5 LBS/IN
-4CC	2	.660	.610	.135	REQ'D	1.21 LBS	5.5 LBS/IN



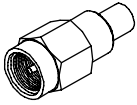
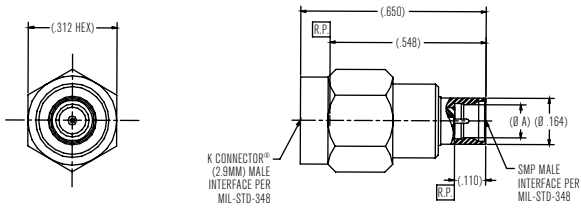
Spring Loaded Bullet - P922



Custom Female to Female Spring Loaded Bullet

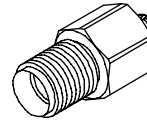
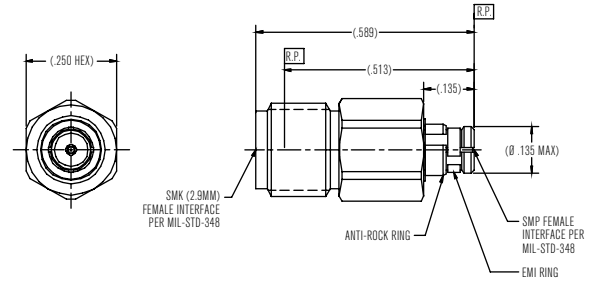
ADAPTERS - SMP TO 2.92mm

SMP Male to 2.92mm Male Straight Adapter / P902



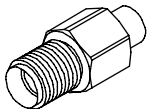
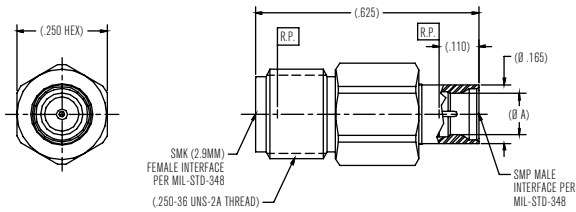
P/N	INTERFACE	(Ø A)
-1CCSF	LIMITED DETENT	.120
-2CCSF	SMOOTH BORE	.125
-3CCSF	FULL DETENT	.116

SMP Female to 2.92mm Female Straight Adapter / P909-1CCSF



P/N
-1
-1SF
-1CCSF

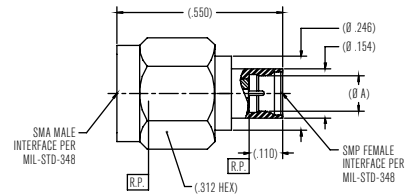
SMP Male to 2.92mm Female Straight Adapter / P903



P/N	INTERFACE	(Ø A)
-1CCSF	LIMITED DETENT	.120
-2CCSF	SMOOTH BORE	.125
-3CCSF	FULL DETENT	.116

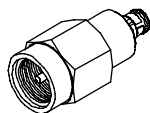
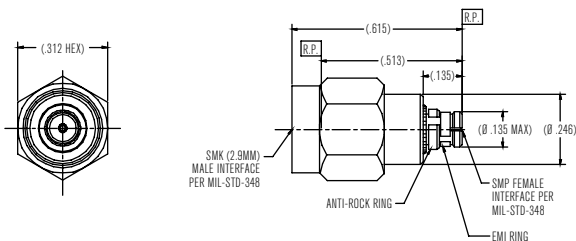
ADAPTERS - SMP TO SMA

SMP Male to SMA Male Straight Adapter / P906



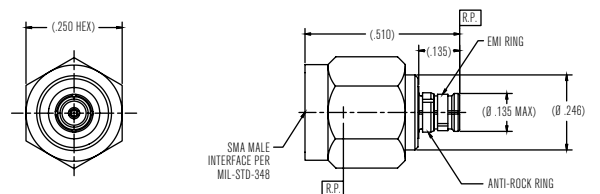
P/N	INTERFACE	(Ø A)
-1CCSF	LIMITED DETENT	.120
-2CCSF	SMOOTH BORE	.125
-3CCSF	FULL DETENT	.116

SMP Female to 2.92mm Male Straight Adapter / P908-1CCSF



P/N
BASIC
-1CCSF

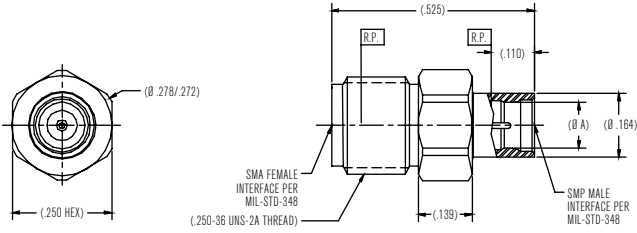
SMP Female to SMA Male Straight Adapter / P907-1CCSF



SMP Configurations

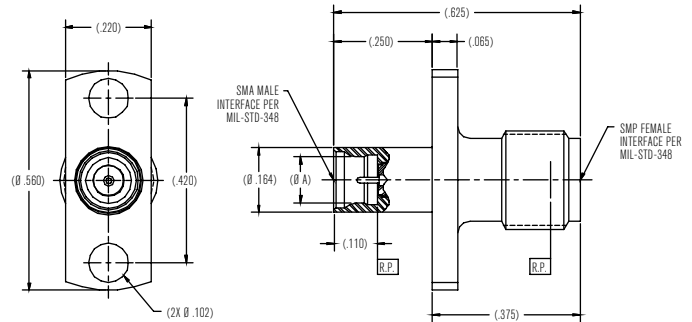
ADAPTERS - SMP TO SMA (CONT.)

SMP Male to SMA Female Straight Adapter / P910



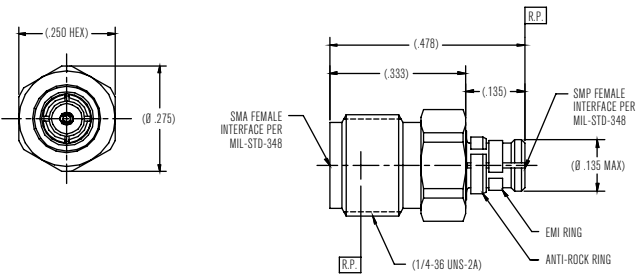
P/N	INTERFACE	(Ø A)
-1CCSF	LIMITED DETENT	.120
-2CCSF	SMOOTH BORE	.125
-3CCSF	FULL DETENT	.116

SMP Male 2-Hole Flange Mount to SMA Female Adapter / P917

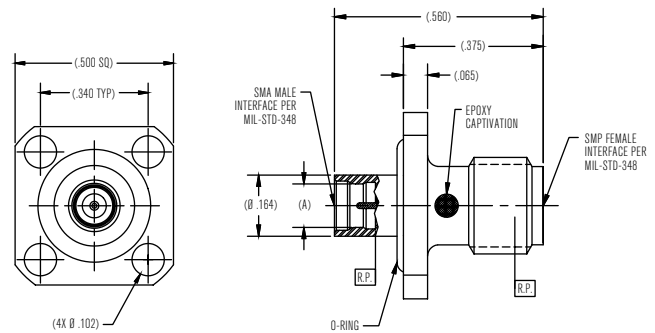


P/N	(Ø A)
-1CCSF	.116
-2CCSF	.120
-3CCSF	.125

SMP Female to SMA Female Straight Adapter / P911-1CCSF

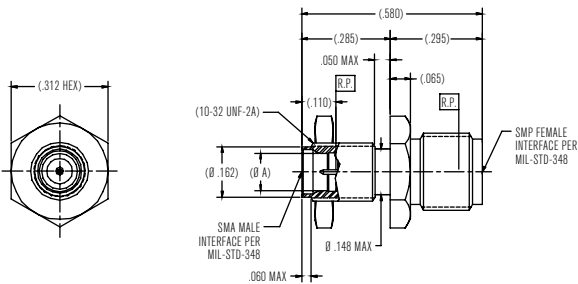


SMP Male 4-Hole Flange Mount to SMA Female Adapter (with O-Ring) / P920



P/N	INTERFACE	(Ø A)
-1CCSF	FULL DETENT	.116
-2CCSF	LIMITED DETENT	.120
-3CCSF	SMOOTH BORE	.125

SMP Male Bulkhead Mount to SMA Female Adapter / P827



P/N	INTERFACE	(Ø A)
-1CCSF	FULL DETENT	.116
-2CCSF	LIMITED DETENT	.120
-3CCSF	SMOOTH BORE	.125

Ordering Information

Configuration		Part Number*	Description	Options
Cable Connectors	For Flexible Cables	P657	SMP female straight connector for flexible cables	Available for different flexible cables (see figure)
		P600	SMP female right angle connector for flexible cables, 18 GHz	
		P601	SMP female right angle connector for flexible cables, 26.5 GHz	
		P663	SMP male straight panel mount connector for flexible cables	
	For Semi-Rigid & Semi-Flex Cables	P651	SMP female straight connector for semi-rigid and semi-flex cables	0.047" & 0.085" cable versions available (see figure)
		P658	SMP female float mount connector for semi-rigid and semi-flex cables	
		P652	SMP female right angle for semi-rigid and semi-flex cables, 12 GHz	
		P655	SMP female right angle for semi-rigid and semi-flex cables, 26.5 GHz	
		P659	SMP female right angle for semi-rigid and semi-flex cables, 18 GHz	
		P662	SMP male bulkhead panel mount connector for semi-rigid cables	
PCB Connectors	Through hole Board Mount	P654	SMP male PCB mount to a straight termination	Different heights and detents available (see figure)
		P603	SMP male straight PCB mount - Square body	
		P646	SMP male right angle PCB mount	Different heights available (see figure)
	Surface Mount	P677	SMP shroud solder-in surface mount - Short body	Different detents available (see figure)
		P703	SMP male straight surface mount	
		P797	SMP male straight to surface mount with posts	
		P839	SMP male straight surface mount	
	Edge Mount	P606	SMP male straight edge mount connector	
		P698	SMP male straight edge mount connector	
	Shrouds	Flange Mount	P670	SMP shroud - Full detent straight 2-hole flange mount
P672			SMP shroud - Limited detent straight 2-hole flange mount	
P673			SMP shroud - Smooth bore straight 2-hole flange mount	
Press-In		P675	SMP press-in shroud	Different detents available (see figure)
		P769	SMP press-in shroud - Short body	
Thread-In		P676	SMP shroud - Thread-in	
Field-Replaceable		P836	SMP male 2-hole flange mount (accepts 0.012" pin)	Narrow flange version available (see figure)
Hermetics	P680	SMP male hermetic shroud - Short body	Different detents and pin styles available (see figure)	
	P682	SMP male hermetic shroud		
	P683	SMP male hermetic thread-in with mounting nut		
	P761	SMP male hermetic thread-in		

Ordering Information

Configuration		Part Number*	Description	Options
Opens, Shorts, Loads		P918	SMP female 50 Ohm termination	
		P919	SMP male 50 Ohm termination	
		P930-1CC ⁺	SMP female short	
		P931-1 ⁺	SMP female open	
Bullets/Adapters		P617	SMP female to SMP female bullet	Different lengths available (see figure)
		P650	SMP female to SMP female bullet - short body	
		P912	SMP male bulkhead to SMP male catcher's mitt	Different detents available (see figure)
		P914	SMP male to SMP female adapter	
		P916	SMP male to SMP male catcher's mitt	
		P922	SMP female to SMP female spring loaded bullet	See chart for available lengths
Adapters	SMP to 2.92mm	P902	SMP male to 2.92mm male straight adapter	Different detents available
		P903	SMP male to 2.92mm female straight adapter	
		P908-1CCSF	SMP female to 2.92mm male straight adapter	
		P909-1CCSF	SMP female to 2.92mm female straight adapter	
	SMP to SMA	P906	SMP male to SMA male straight adapter	Different detents available
		P907-1CCSF	SMP female to SMA male straight adapter	
		P910	SMP male to SMA female straight adapter	Different detents available
		P911-1CCSF	SMP female to SMA female straight adapter	
		P827	SMP male Bulkhead mount to SMA female adapter	Different detents available
		P917	SMP male 2-hole flange mount to SMA female adapter	
	P920	SMP male 4-hole flange mount to SMA female adapter (with O-ring)		

* All parts have a suffix. Please refer to figures for more information.

+ These part numbers don't require an additional suffix.