# Amphenol

Cable & Interconnect Technologies

**Connectors & Accessories** 

# SMP Interconnect Series



SMP Interconnect Series

### INTRODUCTION

Amphenol CIT launched the SMP "push-on" connector product line two decades ago to facilitate dense packaging within RF/ Microwave systems.

The SMP interface enables design engineers to increase design performance and complexity while also improving form factor. The SMP interconnect series relies on a floating female-to-female adapter (commonly referred to as a bullet) to enable SMP male and PCB connector-equipped boards to be stacked. This durable construction gives this product line the ability to:

- » Tolerate radial and axial misalignment
- » 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 (SMPM, TMP®, and SMPS) to facilitate rapid assembly and testing for the gamut of military and commercial RF/Microwave applications.

### MATERIALS AND FINISH (PCB CONNECTORS)

Metal	Specifications
BeCu (Beryllium Copper)	ASTM B196 and/or ASTM B197
Brass	ASTM B36, B121, B16, B16M
Stainless Steel	ASTM A484/ A582 or A555/581
Iron-Nickel-Cobalt	ASTM F-15
Dielectric	Specifications
Virgin PTFE Fluorocarbon	ASTM D 1710 and ASTM D 1457
Polyamide-imide	ASTM D5204 Group 2 Class 1
Glass	Corning 7070 or Equivalent
Finish	Specifications
Gold (75u in. Typ)	ASTM B488 Type 1, Class 1.25
Nickel (100u in. Typ)	SAE AMS-QQ-N-290
Passivation	ASTM A967

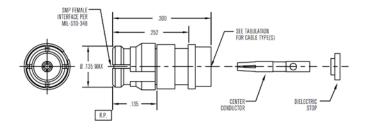
### **FEATURES**

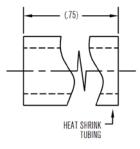
- » DC 40 GHz frequency range
- » 50 Ω impedance
- » Blindmate configuration
- » Industry standard per MIL-STD-348
- » MIL-PRF-39012 compliant
- » Ability to withstand radial/axial misalignment
- » Board-mount, field-replaceable, bullets, hermetic, and cable connector configurations
- » Custom connectors available

### **SPECIFICATIONS** Specifications Parameter Impedance 50 Ω Frequency Range DC - 40 GHz DC - 26 GHz: 1.15:1 (max) VSWR 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 Full Detent 15 lb. typical Force to Limited Detent 7 lb. typical Engage Smooth Bore 2 lb. typical Full Detent 5 lb. typical Force to Limited Detent 3 lb. typical Disengage Smooth Bore 0.5 lb. typical +/- .020"\* Radial Misalignment Axial Misalignment .10" **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 MIL-STD-202. Method 101, Cond B Corrosion Vibration MIL-STD-202, Method 204, Cond D MIL-STD-202, Method 213, Cond I Shock \*When mated to a Catcher's Mitt interface

### CABLE CONNECTORS: FLEXIBLE CABLES

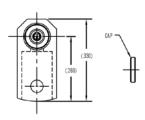
### SMP Female Straight Connector for Flexible Cables/P657





P/N	Cable Type			
-1CC	RG178			
-2CC	RG316			
-3CC	RD178			
-4CC	RD316			
-9CC	HFE100D			

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



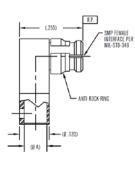
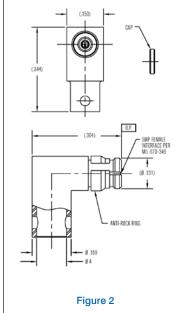


Figure 1

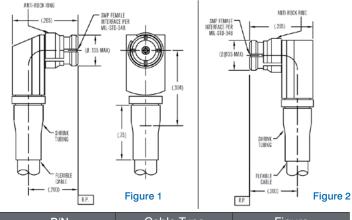


 P/N
 Ø A
 Cable Type
 Figure

 -9CC
 .090"
 HFE100D
 1

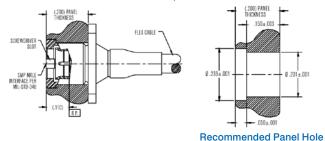
 -4CC
 .100"
 RD316
 2

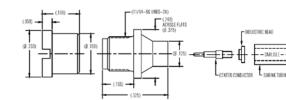
SMP Female Right-Angle Connector for Flexible Cables, 26.5 GHz/P601



P/N	Cable Type	Figure
-9CC	HFE100D	1
-8CC	HGE055D	2

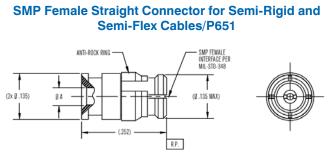
### SMP Male Straight Panel-Mount Connector for Flexible Cables/P663



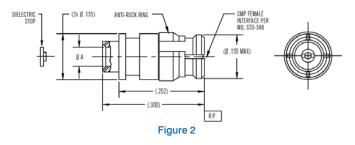


P/N	Cable Type	Interface	P/N	Cable Type	Interface
-1CC	RG178 (or Equivalent)	Catcher's Mitt	-7CC	RG316 (Or Equivalent)	Limited Detent
-2CC	RD178 (or Equivalent)	Catcher's Mitt	-8CC	RD316 (or Equivalent)	Limited Detent
-3CC	RG316 (or Equivalent)	Catcher's Mitt	-9CC	RG178 (or Equivalent)	Full Detent
-4CC	RD316 (or Equivalent)	Catcher's Mitt	-10CC	RD178 (or Equivalent)	Full Detent
-5CC	RG178 (or Equivalent)	Limited Detent	-11CC	RG316 (or Equivalent)	Full Detent
-6CC	RD178 (or Equivalent)	Limited Detent	-12CC	RD316 (or Equivalent)	Full Detent

### CABLE CONNECTORS: SEMI-RIGID & SEMI-FLEX® CABLES

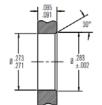






P/N	Cable Type	Ø A Min.	Figure
-1CC	Ø .047" Semi-Rigid/Semi-Flex	.049"	2
-2CC	Ø .085" Semi-Rigid/Semi-Flex	.085"	1
-3CC	Ø .047" Low-Loss	.047"	2
-4CC	Ø .085" Low-Loss	.085"	1

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





**Recommended Mounting Panel** 

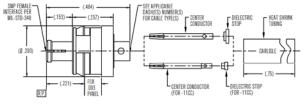
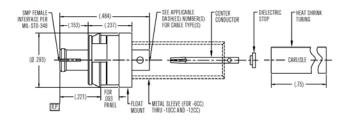


Figure 1

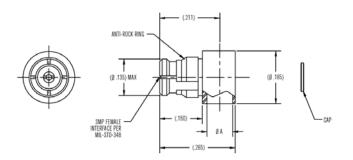
SMP Female Float-Mount Connector for Semi-Rigid and Semi-Flex Cables/P658 (Cont'd.)



### Figure 2

P/N	Cable Type	Figure
-1CC	UFF092A	
-2CC	RG316	
-3CC	HFE100D	1
-4CC	HFE100D	
-5CC	Ø .085" Semi-Rigid/Semi-Flex	
-6CC	UFF092A	
-7CC	RG316	
-8CC	HFE100D	2
-9CC	HFE100D	
-10CC	Ø .085" Semi-Rigid/Semi-Flex	
-11CC	Ø .047" Semi-Rigid/Semi-Flex	1
-12CC	Ø .047" Semi-Rigid/Semi-Flex	2

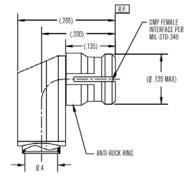
### SMP Female Right-Angle for Semi-Rigid and Semi-Flex Cable 12 GHz/P652

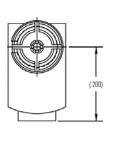


P/N	Ø A Min.	Cable Type		
-1CC	.049"	.047" Semi-Rigid/Semi-Flex		
-2CC	.088"	.085" Semi-Rigid/Semi-Flex		
-3CC	.049"	.047" Low-Loss		
-4CC	.088"	.085" Low-Loss		

### CABLE CONNECTORS: SEMI-RIGID & SEMI-FLEX<sup>®</sup> CABLES (CONT'D.)

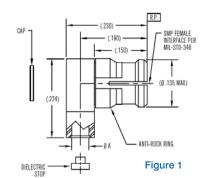
### SMP Female Right-Angle for Semi-Rigid and Semi-Flex Cables, 26.5 GHz/P655

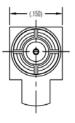


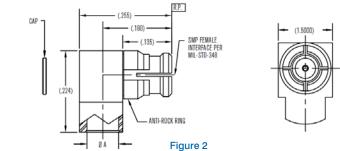


P/N	Ø A Min.	Cable Type		
-1CC	.049"	.047" Semi-Rigid/Semi-Flex		
-2CC	.088"	.085" Semi-Rigid/Semi-Flex		
-3CC	.049"	.047" Low-Loss		
-4CC	.088"	.085" Low-Loss		

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

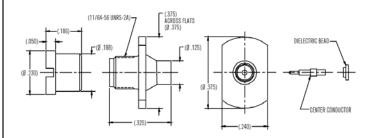


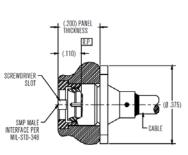


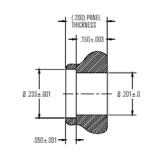


P/N	Ø A Min.	Cable Type	Figure
-1CC	.049"	.047" Semi-Rigid/Semi-Flex	1
-2CC	.088"	.085" Semi-Rigid/Semi-Flex	2
-3CC	.049"	.047" Low-Loss	1
-4CC	.088"	.085" Low-Loss	2

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







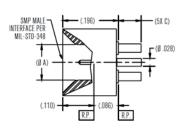
Installed View

**Recommended Panel Hole** 

P/N	Cable Type	Interface
-1CC	.047" Semi-Rigid/Semi-Flex	Catcher's Mitt
-2CC	.085" Semi-Rigid/Semi-Flex	Catcher's Mitt
-3CC	.047" Low-Loss	Catcher's Mitt
-4CC	.085" Low-Loss	Catcher's Mitt
-5CC	.047" Semi-Rigid/Semi-Flex	Full Detent
-6CC	.085" Semi-Rigid/Semi-Flex	Full Detent
-7CC	.047" Low-Loss	Full Detent
-8CC	.085" Low-Loss	Full Detent
-9CC	.047" Semi-Rigid/Semi-Flex	Limited Detent
-10CC	.085" Semi-Rigid/Semi-Flex	Limited Detent
-11CC	.047" Low-Loss	Limited Detent
-12CC	.085" Low-Loss	Limited Detent
-13CC	.085" Semi-Rigid/Semi-Flex	Limited Detent/Catcher's Mitt

### 4

## PCB CONNECTORS: THROUGH-HOLE BOARD-MOUNT SMP Male PCB-Mount to a Straight Termination/P654



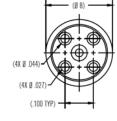


Figure 1

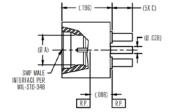
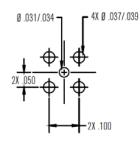




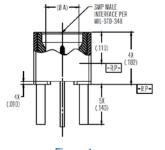
Figure 2



### 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



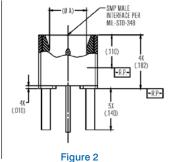
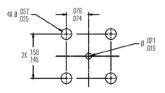
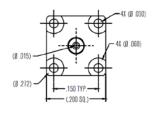


Figure 1

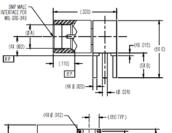


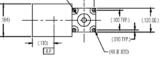


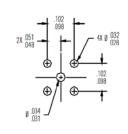
Recommended Mounting Hole Pattern

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





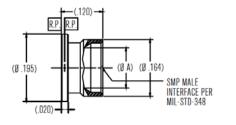


Recommended Mounting Hole Pattern

P/N	Interface	(Ø A)	(B)	(C)
-1CC	Full Detent	(.116")	(.125")	(.287")
-2CC	Full Detent	(.116")	(.115")	(.297")
-3CC	Full Detent	(.116")	(.155")	(.337")

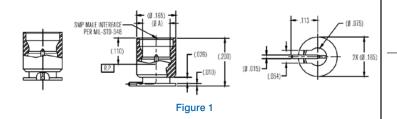
### PCB CONNECTORS: SURFACE-MOUNT

### 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



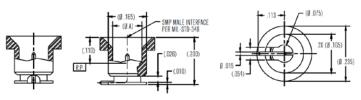
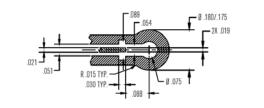


Figure 2





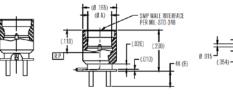
Mounting Hole Pattern Dimensions shown are for Rogers 4350 PCB material. These dimensions may vary depending on PCB material used.

P/N	Interface	(Ø A)	Figure
-1CC	Full Detent	(.116")	1
-2CC	Limited Detent	(.120")	1
-3CC	Smooth Bore	(.125")	1
-4CC	Full Detent	(.116")	2



P703-1CC

### SMP Male Straight to Surface-Mount with Posts/P797



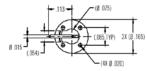
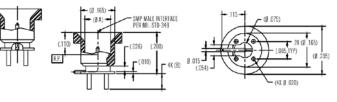
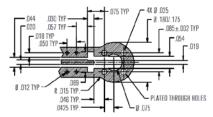


Figure 1









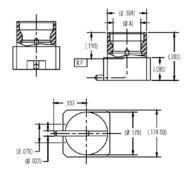
### Mounting Hole Pattern

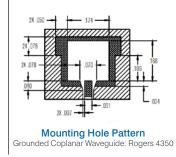
Dimensions shown are for Rogers 4350 PCB material. These dimensions may vary depending on PCB material used.

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

### PCB CONNECTORS: SURFACE-MOUNT

SMP Male Straight Surface-Mount/P839



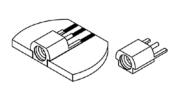


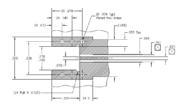
P/N	Interface	(Ø A)
-1CC	Full Detent	(.116")
-2CC	Limited Detent	(.120")
-3CC	Smooth Bore	(.125")

### PCB CONNECTORS: EDGE-MOUNT

### SMP Male Straight Edge-Mount Connector/P606







### PCB Mount Detail

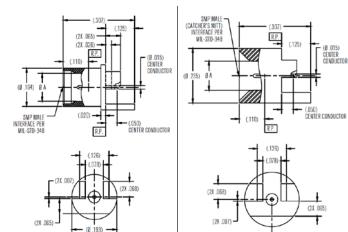
### **Recommended PCB Cutout**

P/N	Interface	ØA	ØВ	С
-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 Connector (P606)

### SMP Male Straight Edge-Mount Connector/P698



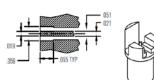


Figure 1

P/N	Interface	ØA	Figure
-1CC	Full Detent	.116"	1
-2CC	Limited Detent	.120"	1
-3CC	Smooth Bore	.125"	1
-4CC	Full Detent	.125"	2

Figure 2

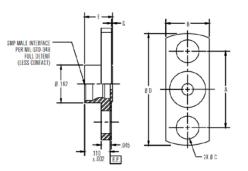
### Recommended PCB Mounting Pattern



Straight Edge-Mount Connector (P698-2CC)

### SHROUDS: FLANGE MOUNT

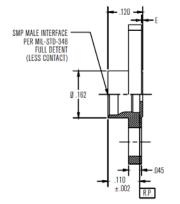
### SMP Shroud — Full Detent Straight 2-Hole Flange-Mount/P670

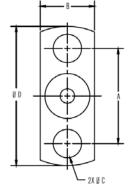


P/N	А	В	ØC	ØD	E	F	G
-1SF	.328"	.187"	.098"	.480"	.120"	.045"	.004"
-2SF	.481"	.223"	.102"	.625"	.120"	.045"	.002"
-3SF	.282"	.165"	.073"	.400"	.120"	.045"	.002"
-4SF	.400"	.186"	.103"	.550"	.120"	.045"	.004"
-5SF	.282"	.165"	.073"	.400"	.120"	.045"	.005"
-6SF	.282"	.165"	*	.400"	.120"	.045"	.005"
-7SF	NR	NR	NR	.625"	.120"	.045"	.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

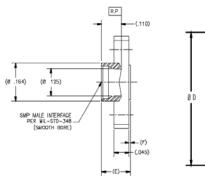
### SMP Shroud — Limited Detent Straight 2-Hole Flange-Mount/P672

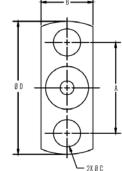




P/N	А	В	ØC	ØD	E
-1SF	.328"	.187"	.098"	.480"	.004"
-2SF	.481"	.223"	.102"	.625"	.004"
-3SF	.282"	.165"	.073"	.400"	.002"
-4SF	.400"	.186"	.103"	.550"	.004"

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



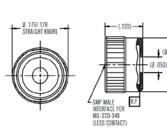


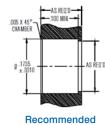
P/N	А	В	ØC	ØD	(E)	(F)
-1SF	.328"	.187"	.098"	.480"	(.120")	(.004")
-2SF	.481"	.223"	.102"	.625"	(.120")	(.002")
-3SF	.282"	.165"	.073"	.400"	(.120")	(.002")

### SHROUDS: PRESS-IN

### SMP Press-In Shroud/P675

(Ø.170)

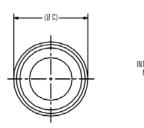


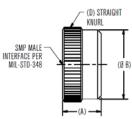


Mounting Hole

P/N	Interface
-1SF	Full Detent
-2SF	Limited Detent
-3SF	Smooth Bore

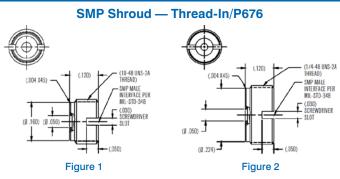
### SMP Press-In Shroud — Full Detent/P769





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

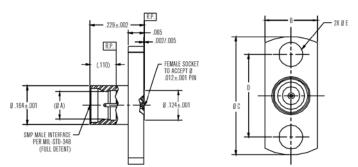
### SHROUDS: THREAD IN



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	(Ø A)	В	ØC	D	ØE
-1CC	Full Detent	(.116")				
-1CCSF	Fuil Deleni	(.110)				
-2CC	Limited Detent	(.120")	.165"	.625"	.481"	.078"
-2CCSF	Linited Detent	(.120)	.105	.025	.401	.070
-3CC	Smooth Bore	(.125")				
-3CCSF	SINUULII DUIE	(.123)				
-4CC	Full Detent	(.116")				
-4CCSF	i uli Deterit	(.110)				
-5CC	Limited Detent	(100")	000	005	401	070
-5CCSF	Limited Detent	(.120")	.223"	.625"	.481"	.078"
-6CC	Crease the Device					
-6CCSF	Smooth Bore	(.125")				
-7CC		(1101)				
-7CCSF	Full Detent	(.116")				
-8CC	Limited Detent	(100")	000	105	.481"	100
-8CCSF	Limited Detent	(.120")	.223"	.485"	.401	.102"
-9CC	Smooth Bore	(1051)				
-9CCSF	SHOULT BUIE	(.125")				

# SMP Male Hermetic Shroud — Short Body/P680

AS REQ'D

Recommended Mounting Hole

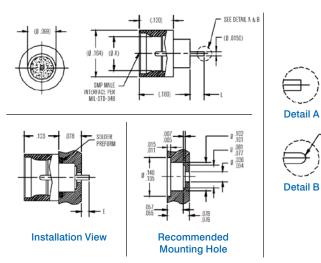
HERMETICS

D/N	last out o ere		(D)		<b>D</b>	F	F	<u> </u>
P/N	Interface	(Ø A)	(B)	(C)	D	E	F	G
-1CC	Full Detent	(.116")	(.120")	(.040")	.037/.039"	.050"	.050"	
-2CC	Limited Detent	(.120")	(.120")	(.040")	037/.039"	.050"	.050"	
-3CC	Smooth Bore	(.125")	(.120")	(.040")	037/.039"	.050"	.050"	
-4CC	Full Detent	(.116")	(.120")	(.040")	037/.039"	.050"	.050"	
-5CC	Limited Detent	(.120")	(.120")	(.040")	037/.039"	.050"	.050"	
-6CC	Smooth Bore	(.125")	(.120")	(.040")	037/.039"	.050"	.050"	See Detail
-10CC	Full Detent	(.116")	(.120")	(.040")	037/.039"	.070"	.050"	A
-11CC	Limited Detent	(.120")	(.120")	(.040")	037/.039"	.070"	.050"	
-12CC	Smooth Bore	(.125")	(.120")	(.040")	037/.039"	.070"	.050"	
-13CC	Full Detent	(.116")	(.120")	(.040")	037/.039"	.090"	.050"	
-14CC	Limited Detent	(.120")	(.120")	(.040")	037/.039"	.090"	.050"	
-15CC	Smooth Bore	(.125")	(.120")	(.040")	037/.039"	.090"	.050"	
-22CC	Full Detent	(.116")	(.120")	(.040")	037/.039"	.050"	.050"	
-23CC	Limited Detent	(.120")	(.120")	(.040")	037/.039"	.050"	.050"	
-24CC	Smooth Bore	(.125")	(.120")	(.040")	037/.039"	.050"	.050"	
-25CC	Full Detent	(.116")	(.120")	(.040")	037/.039"	.070"	.050"	See
-26CC	Limited Detent	(.120")	(.120")	(.040")	037/.039"	.070"	.050"	Detail B
-27CC	Smooth Bore	(.125")	(.120")	(.040")	037/.039"	.070"	.050"	
-28CC	Full Detent	(.116")	(.120")	(.040")	037/.039"	.090"	.050"	
-29CC	Limited Detent	(.120")	(.120")	(.040")	037/.039"	.090"	.050"	
-30CC	Smooth Bore	(.125")	(.120")	(.040")	037/.039"	.090"	.050"	

FULL RADIUS

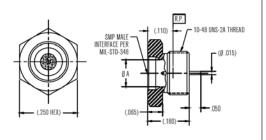
### HERMETICS (CONT'D.)

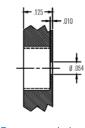
### SMP Male Hermetic Shroud/P682



P/N	Interface	(Ø A)	L	E	Detail
-1CC	Full Detent	.116"	.050"	.030"	А
-2CC	Limited Detent	.120"	.050"	.030"	А
-3CC	Smooth Bore	.125"	.050"	.030"	А
-4CC	Full Detent	.116"	.240"	.220"	В
-5CC	Limited Detent	.120"	.240"	.220"	В
-6CC	Smooth Bore	.125"	.240"	.220"	В

### SMP Male Hermetic Thread-In with Mounting Nut/P683

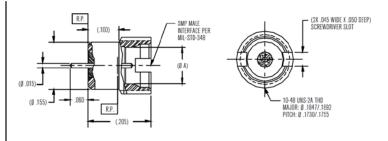




Recommended Mounting Hole

P/N	Interface	ØA
-1CC	Full Detent	.116"
-2CC	Limited Detent	.120"
-3CC	Smooth Bore	.125"

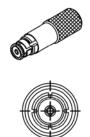
### SMP Male Hermetic Thread-In/P761

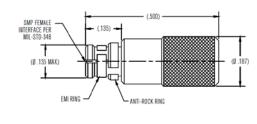


P/N	Interface	(Ø A)
-1CC	Limited Detent	(.120")
-2CC	Full Detent	(.116")

### **OPEN/SHORTS/LOADS**

### SMP Female 50 $\Omega$ Termination/P918



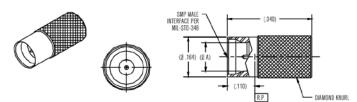


**P/N** -1CC



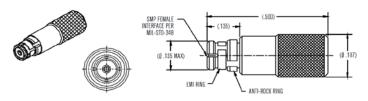
Female 50 Ω Termination (P918-1CC)

### SMP Male 50 Ω Termination/P919



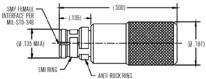
P/N	Interface	(Ø A)
-1CCSF	Full Detent	(.116")
-2CCSF	Limited Detent	(.120")
-3CCSF	Smooth Bore	(.125")

### SMP Female Short/P930-1CC



### SMP Female Open/P931-1





### **BULLETS/ADAPTERS**

### SMP Female to SMP Female Bullet/P617

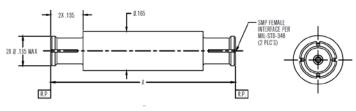


Figure 1

### SMP Female to SMP Female Bullet/P617 (Cont'd.)

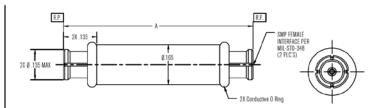


Figure 2

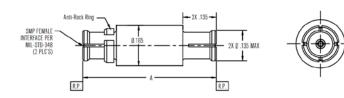
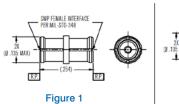
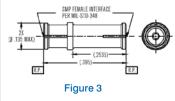


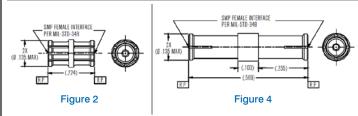
Figure 3

P/N	А	Figure	P/N	A	Figure
-1CC	.768"/.770"	1	-6CC	.414"/.416"	1
-2CC	.850"/.852"	1	-7CC	.427"/.429"	1
-3CC	1.365"/1.367"	1	-8CC	.538"/.540"	3
-4CC	.439"/.441"	2	-9CC	.528"/.530"	3
-5CC	.768"/.770"	2			





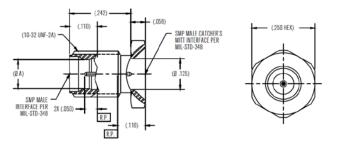




P/N	Figure	P/N	Figure
-1CC	1	-3CC	3
-2CC	2	-4CC	4

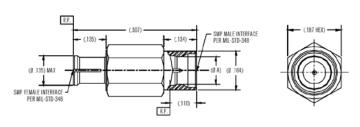
### BULLETS/ADAPTERS (CONT'D.)

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



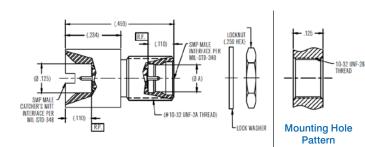
P/N	Interface	(Ø A)
-1CCSF	Full Detent	(.116")
-2CCSF	Limited Detent	(.120")
-3CCSF	Smooth Bore	(.125")

### SMP Male to SMP Female Adapter/P914



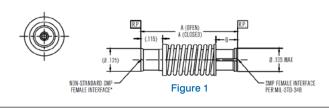
P/N	Interface	(Ø A)
-1CCSF	Full Detent	(.116")
-2CCSF	Limited Detent	(.120")
-3CCSF	Smooth Bore	(.125")

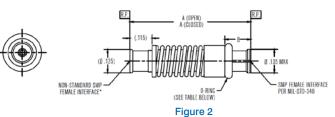
### SMP Male to SMP Female Catcher's Mitt/P916



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





\* For use with Smooth Bore and Catcher's Mitt interfaces only

P/N	Figure	A (Open)	A (Closed)	В	O-Ring	Spring Pre-Load	Spring Rate
-2CC	1	.510"	.460"	.115"	No	1.95 lb.	15.0 lb./in
-3CC	2	.745"	.695"	.115"	No	1.21 lb.	5.5 lb./in
-4CC	2	.660"	.610"	.135"	Yes	1.21 lb.	5.5 lb./in



Female to Female Spring-Loaded Bullet (P922)

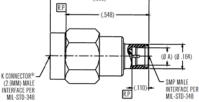


Custom Female to Female Spring-Loaded Bullet

### ADAPTERS: SMP TO 2.92 MM

### SMP Male to 2.92 mm Male Straight Adapter/P902

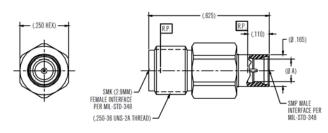






48	P.1.1	MIL-S1D-348
P/N	Interface	(Ø A)
-1CCSF	Limited Detent	(.120")
-2CCSF	Smooth Bore	(.125")
-3CCSF	Full Detent	(.116")

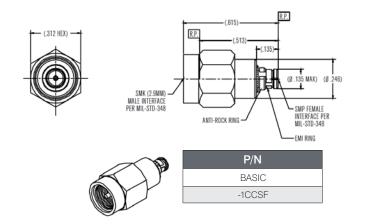
### SMP Male to 2.92 mm Female Straight Adapter/P903



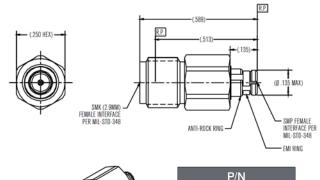


	P/N	Interface	(Ø A)
	-1CCSF	Limited Detent	(.120")
-	2CCSF	Smooth Bore	(.125")
	3CCSF	Full Detent	(.116")

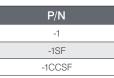
### SMP Female to 2.92 mm Male Straight Adapter/P908-1CCSF



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

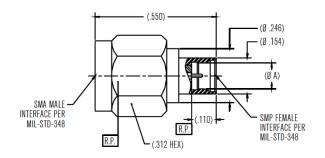






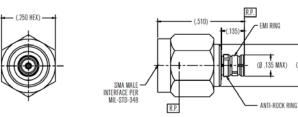
### ADAPTERS: SMP TO SMA

### 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")

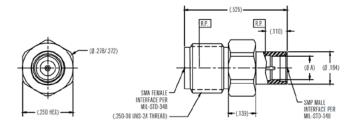
### SMP Female to SMA Male Straight Adapter/P907-1CCSF



(Ø.246)

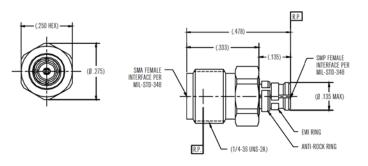
### ADAPTERS: SMP TO SMA (CONT'D.)

### SMP Male to SMA Female Straight Adapter/P910

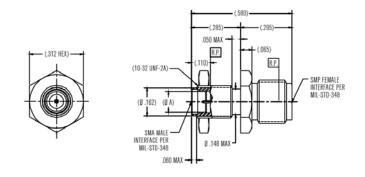


P/N	Interface	(Ø A)
-1CCSF	Limited Detent	(.120")
-2CCSF	Smooth Bore	(.125")
-3CCSF	Full Detent	(.116")

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

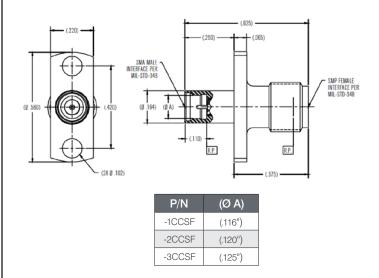


### SMP Male Bulkhead-Mount to SMA Female Adapter/P827

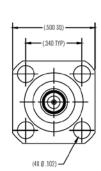


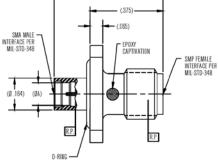
P/N	Interface	(Ø A)
-1CCSF	Full Detent	(.116")
-2CCSF	Limited Detent	(.120")
-3CCSF	Smooth Bore	(.125")

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



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





(.560)

P/N	Interface	(Ø A)
-1CCSF	Full Detent	(.116")
-2CCSF	Limited Detent	(.120")
-3CCSF	Smooth Bore	(.125")

# SMP Interconnect Series Ordering Information

Configuration		Part Number*	Description	Options
	For Flexible	P657	SMP Female • Straight	
		P600	SMP Female • Right Angle • 18 GHz	Available for various flexible cables.
	Cables	P601	SMP Female • Right Angle • 26.5 GHz	See page 2
		P663	SMP Male • Straight Panel Mount	
Cable		P651	SMP Female • Straight	
Connectors		P658	SMP Female • Float Mount	0.047" & 0.085" cable versions available. See page 3
	For Semi-Rigid	P652	SMP Female • Right Angle • 12 GHz	
	& Semi- Flex <sup>®</sup> Cables	P655	SMP Female • Right Angle • 26.5 GHz	
		P659	SMP Female • Right Angle • 18 GHz	0.047" & 0.085" cable versions available. See page 4
		P662	SMP Male • Bulkhead Panel-Mount	
		P654	SMP Male • PCB Mount to a Straight Termination	
	Through- Hole Board-	P603	SMP Male • Straight PCB mount • Square Body	Various heights and/or detents available. See page 5
	Mount	P646	SMP Male • Right Angle • PCB Mount	
	Surface- Mount	P677	SMP Shroud • Solder-In • Short Body	
PCB Connectors		P703	SMP Male • Straight	Various detents available. See page 6
		P797	SMP Male • Straight to Surface-Mount • With Posts	
		P839	SMP Male • Straight	
	Edge-Mount	P606	SMP Male • Straight	Various detents available. See page 7
		P698	SMP Male • Straight	
	Flange- Mount	P670	SMP Full Detent • Straight 2-Hole	
		P672	SMP Limited Detent • Straight 2-Hole	Various detents available. See page 8
		P673	SMP Smooth Bore • Straight 2-Hole	
Shrouds		P675	SMP Press-In Shroud	Various detents available. See page 8
	Press-In	P769	SMP Press-In Shroud • Short Body	Various detents available. See page 8
	Thread-In	P676	SMP Thread-In Shroud	Various detents available. See page 9
	Field- Replaceable	P836	SMP Male • 2-Hole Flange-Mount • Accepts 0.012" Pin	Narrow flange version available. See page 9
Hermetics		P680	SMP Male • Hermetic Shroud • Short Body	Various detents available. See page 9
		P682	SMP Male • Hermetic Shroud	
		P683	SMP Male • Hermetic • Thread-In • With Mounting Nut	Various detents available. See page 10
		P761	SMP Male • Hermetic • Thread-In	

# SMP Interconnect Series Ordering Information Cont'd.

Configuration		Part Number*	Description	Options	
Opens, Shorts, Loads		P918	SMP Female • 50 $\Omega$ Termination	Various detents available. See page 10	
		P919	SMP Female • 50 $\Omega$ Termination		
		P930-1CC+	SMP Female • Short Body Adapter	Various detents available. See page 11	
		P931-1+	SMP Female • Open		
		P617	SMP Female to SMP Female Bullet	Various lengths available.	
		P650	SMP Female to SMP Female Bullet • Short Body Adapter	See page 11	
		P912	SMP Male Bulkhead to SMP Male • Catcher's Mitt Adapter		
Bullets	/Adapters	P914	SMP Male to SMP Female Adapter	Various detents available. See page 12	
		P916	SMP Male to SMP Male • Catcher's Mitt Adapter		
		P922	SMP Female to SMP Female Spring-Loaded Bullet	Various lengths available. See page 12	
	SMP to 2.92 MM	P902	SMP Male to 2.92 mm Male • Straight		
		P903	SMP Male to 2.92 mm Female • Straight	Various detents available.	
		P908-1CCSF	SMP Female to 2.92 mm Female • Straight	See page 13	
		P909-1CCSF	SMP Female to 2.92 mm Female • Straight		
	SMP to SMA	P906	SMP Male to SMA Male • Straight	Various detents available.	
Adapters		P907-1CCSF	SMP Female to SMA Male • Straight	See page 13	
		P910	SMP Male to SMA Female • Straight		
		P911-1CCSF	SMP Female to SMA Female • Straight		
		P827	SMP Male Bulkhead-Mount to SMA Female	Various detents available. See page 14	
		P917	SMP Male 2-Hole Flange-Mount to SMA Female		
		P920	SMP Male 4-Hole Flange-Mount to SMA Female • With O-Ring		

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

\*These part numbers don't require an additional suffix.



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