

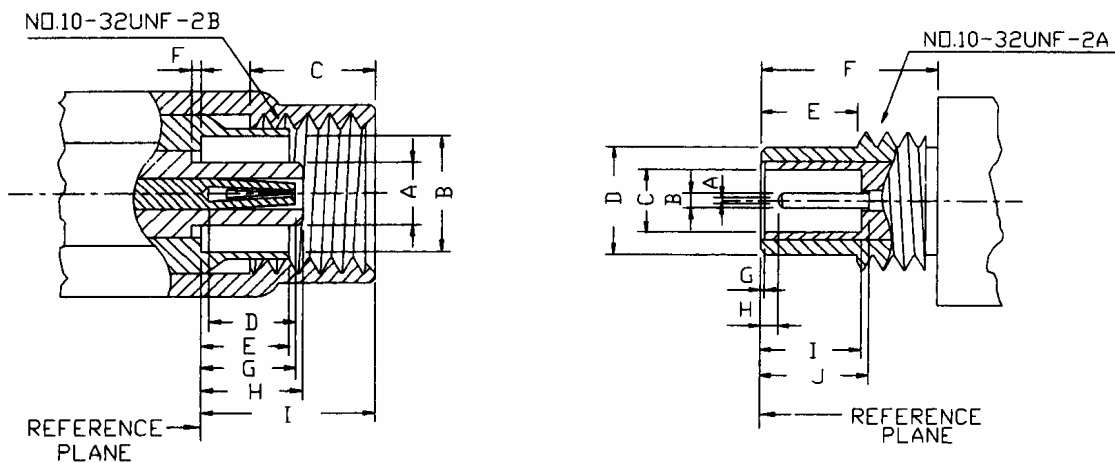
## SMC

50 ohm 0 – 10 GHz

SMC connectors are similar to the SMB in general size and performance, but feature threaded couplings rather than snap-on types.

As with the SMB, its small size, reliable performance, and moderate cost make the SMC an excellent consideration where packaging density is a must. Its threaded coupling ensures peak performance in applications where vibration or shock may be a design consideration

### INTERFACE MATING DIMENSIONS:



PLUG		
Letter	Millimeters (Inches)	
	Minimum	Maximum
A	2.01 (.079)	2.06 (.081)
B	3.73 (.147)	-
C	2.79 (.110)	-
D	2.79 (.110)	-
E	-	3.10 (.122)
F	0.00 (.000)	-
G	3.23 (.127)	3.40 (.134)
H	3.30 (.130)	3.40 (.134)
I	-	5.92 (.233)

JACK		
Letter	Millimeters (Inches)	
	Minimum	Maximum
A	-	0.25 (.010)
B	0.48 (.019)	0.53 (.021)
C	2.08 (.082)	2.16 (.085)
D	3.66 (.144)	3.71 (.146)
E	3.12 (.123)	3.38 (.133)
F	5.94 (.234)	-
G	0.00 (.000)	-
H	0.79 (.031)	-
I	3.40 (.134)	3.61 (.142)
J	3.40 (.134)	3.51 (.138)

**Electrical:**

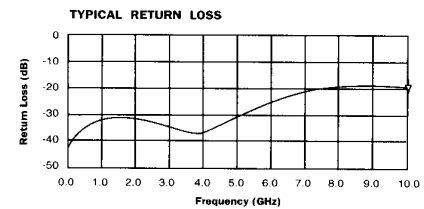
<b>Impedance</b>	50 ohm
<b>Frequency Range</b>	0 to 10.0 GHz
<b>VSWR</b>	$1.15 + 0.04 \times f$ GHz max (straight) $1.25 + 0.04 \times f$ GHz max (right angle) <ul style="list-style-type: none"> <li>RG – 174, 188, 316 → <math>1.15 + 0.04 \times f</math> GHz max (straight)  <math>1.25 + 0.04 \times f</math> GHz max (right angle)</li> <li>RG – 178, 196 → <math>1.25 + 0.04 \times f</math> GHz max (straight)  <math>1.4 + 0.06 \times f</math> GHz max (right angle)</li> </ul>
<b>Voltage Rating</b>	<ul style="list-style-type: none"> <li>RG – 174, 188, 316 → 335 volts rms max</li> <li>RG – 178, 196 → 250 volts rms max</li> </ul>
<b>Dielectric Withstanding Voltage</b>	<ul style="list-style-type: none"> <li>RG – 174, 188, 316 → 750 volts rms max</li> <li>RG – 178, 196 → 500 volts rms max</li> </ul>
<b>Contact Resistance</b>	center contact = 6.0 Milliohms max outer contact = 1.0 Milliohms max
<b>RF Leakage</b>	-55 dB min @ 3 GHz
<b>Insertion Loss</b>	.4 dB max (straight) .6 dB max (right angle)
<b>Insulation Resistance</b>	1,000 Megohms min

**Mechanical & Environmental:**

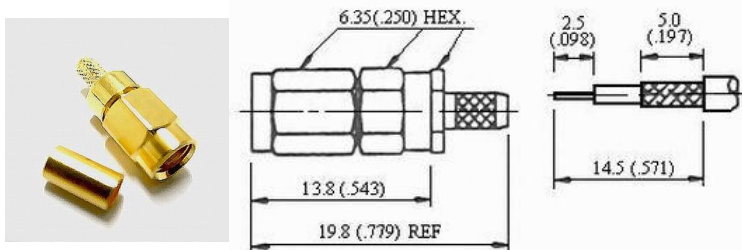
<b>Mating</b>	# 10 – 32 threaded coupling
<b>Cable Retention</b>	RG – 174, 188, 316 → 20 lbs min RG – 178, 196 → 6 lbs min
<b>Durability</b>	500 matings
<b>Coupling Nut Retention</b>	40 lbs min
<b>Temperature Range</b>	-65 °C to 165 °C
<b>Vibration</b>	MIL-STD-1344 Method 2005 Test Cond. IV.
<b>Salt Spray</b>	MIL-STD-202 Method 101 Test Cond. B.
<b>Temperature Cycling</b>	MIL-STD-1344 Method 1003 Test Cond. A.

**Material:**

	<b>Material</b>	<b>Plating</b>
<b>Connector Body</b>	Brass	Nickel or Gold
<b>Center Contact</b>	Male: Brass Female: Beryllium Copper	Gold
<b>Insulation</b>	Teflon	None
<b>Gasket</b>	Silicone Rubber	None
<b>Crimp Ferrule</b>	Annealed Copper	Same as Body



**Straight Plug Crimp ( SMC )**

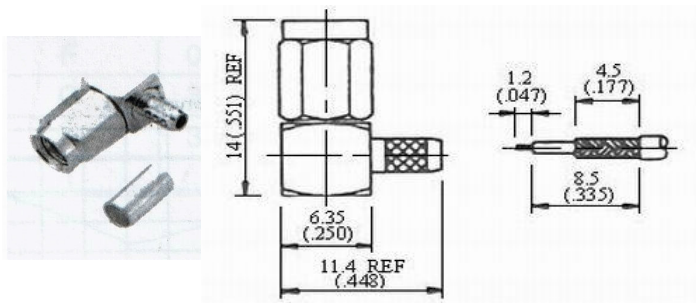


PART NO.	APPLICABLE CABLE RG/U
SMC-1101-TGG	174, 188A, 316
SMC-1102-TGG	178, 196

**Description:**  
Flexible Cable-Crimp Attachment

Finish: Gold plated center contact & body  
Insulation: Teflon

### Right Angle Plug Crimp ( SMC )

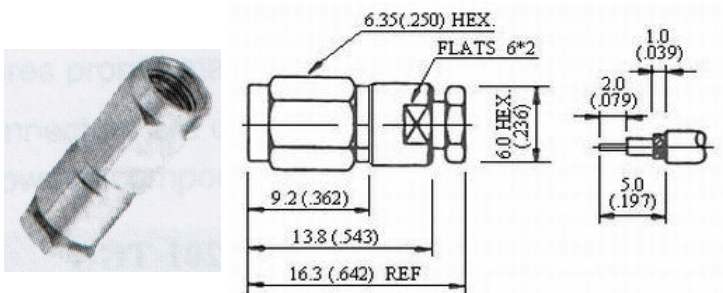


PART NO.	APPLICABLE CABLE RG/U
SMC-1103-TGG	174, 188A, 316
SMC-1104-TGG	178, 196

**Description:**  
Flexible Cable-Crimp Attachment

Finish: Gold plated center contact & body  
Insulation: Teflon

### Straight Plug Clamp ( SMC )

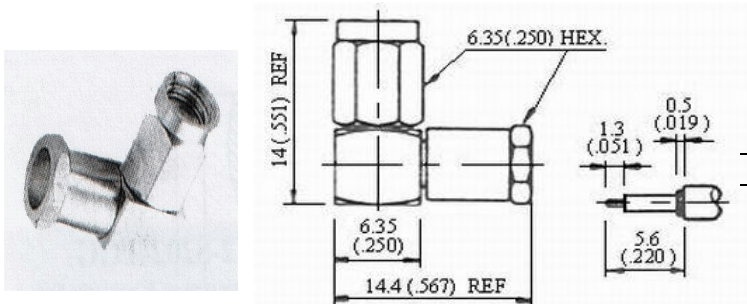


PART NO.	APPLICABLE CABLE RG/U
SMC-2101-TGG	174, 188A, 316
SMC-2102-TGG	178, 196

**Description:**  
Flexible Cable-Clamp Attachment

Finish: Gold plated center contact & body  
Insulation: Teflon

### Right Angle Plug Clamp ( SMC )

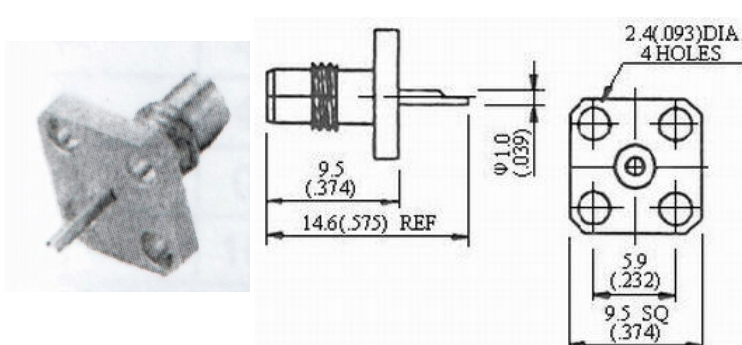


PART NO.	APPLICABLE CABLE RG/U
SMC-2103-TGG	174, 188A, 316
SMC-2104-TGG	178, 196

**Description:**  
Flexible Cable-Clamp Attachment

Finish: Gold plated center contact & body  
Insulation: Teflon

### Square Flange Jack Receptacle ( SMC )

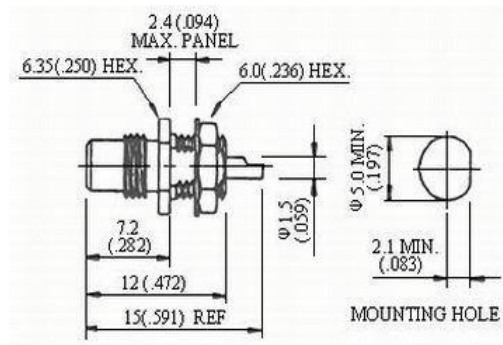


PART NO.
SMC-3201-TGG

**Description:**  
Bulkhead, Panel Mount Receptacles  
(Solder Pot Contact)

Finish: Gold plated center contact & body  
Insulation: Teflon

**Straight Bulkhead Jack Receptacle ( Front Mount ) ( SMC )**

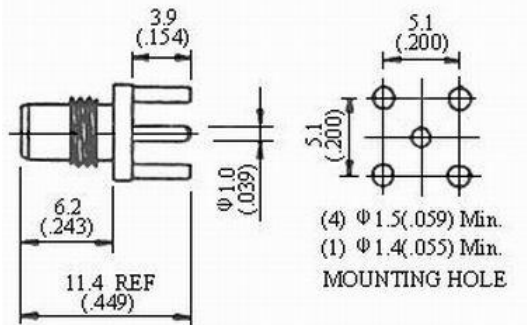


PART NO. \_\_\_\_\_  
SMC-4201-TGG

**Description:**  
Bulkhead, Panel Mount Receptacles  
(Solder Pot Contact)

Finish: Gold plated center contact & body  
Insulation: Teflon

**Straight PCB Mount Jack Receptacle ( SMC )**

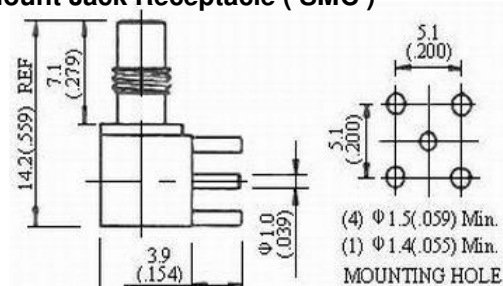
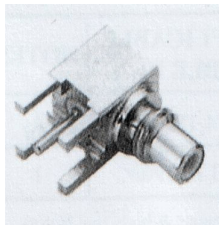


PART NO. \_\_\_\_\_  
SMC-5201-TGG

**Description:**  
Printed Circuit Board Receptacles

Finish: Gold plated center contact & body  
Insulation: Teflon

**Right Angle PCB Mount Jack Receptacle ( SMC )**

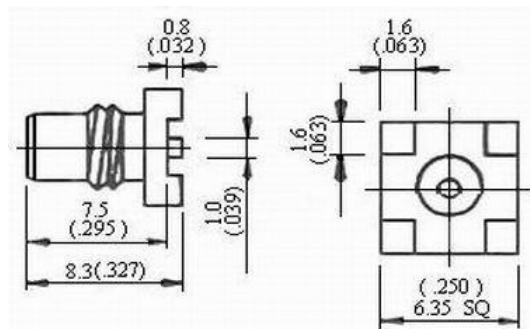


PART NO. \_\_\_\_\_  
SMC-5202-TGG

**Description:**  
Printed Circuit Board Receptacles

Finish: Gold plated center contact & body  
Insulation: Teflon

**Straight Surface Mount Jack Receptacle ( SMC )**

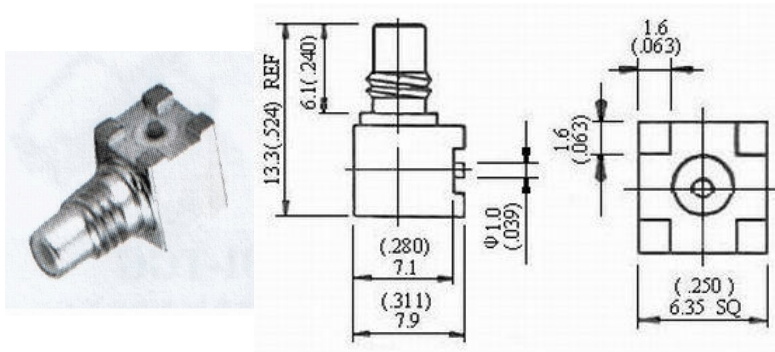


PART NO. \_\_\_\_\_  
SMC-5203-TGG

**Description:**  
Surface Mount Receptacles

Finish: Gold plated center contact & body  
Insulation: Teflon

**Right Angle Surface Mount Jack Receptacle ( SMC )**

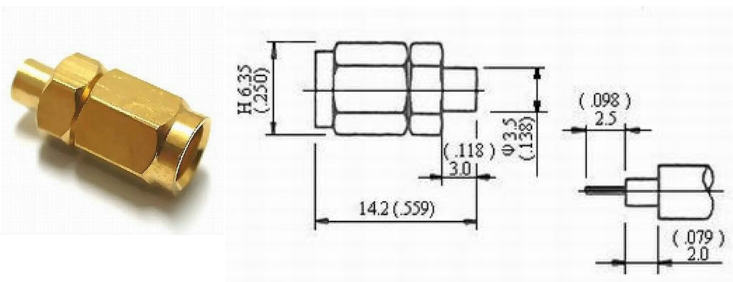


PART NO.  
SMC-5204-TGG

**Description:**  
Surface Mount Receptacles

Finish: Gold plated center contact & body  
Insulation: Teflon

**Straight Plug ( SMC )**

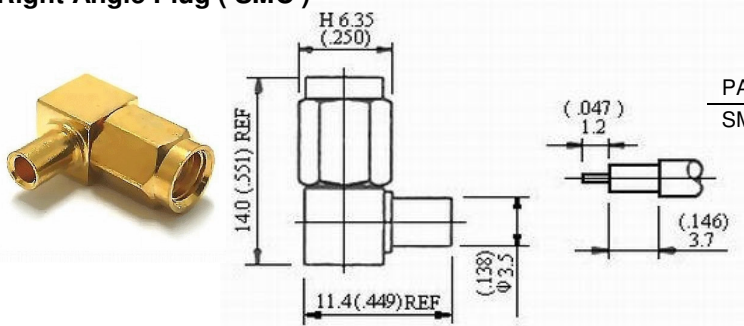


PART NO. | APPLICABLE CABLE RG/U  
SMC-7101-TGG | RG/U (.085")

**Description:**  
For Semi-Rigid Cable  
(.085" Direct Solder Attachment)

Finish: Gold plated center contact & body  
Insulation: Teflon

**Right Angle Plug ( SMC )**



PART NO. | APPLICABLE CABLE RG/U  
SMC-7102-TGG | RG/U (.085")

**Description:**  
For Semi-Rigid Cable  
(.085" Direct Solder Attachment)

Finish: Gold plated center contact & body  
Insulation: Teflon