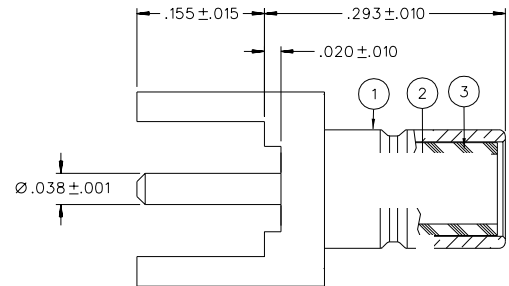
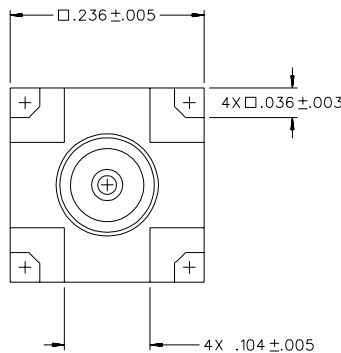
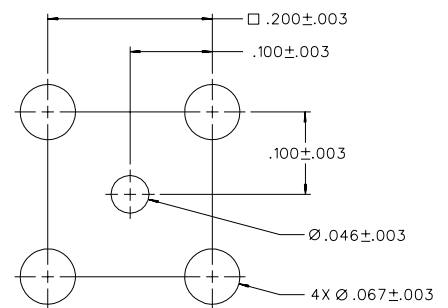


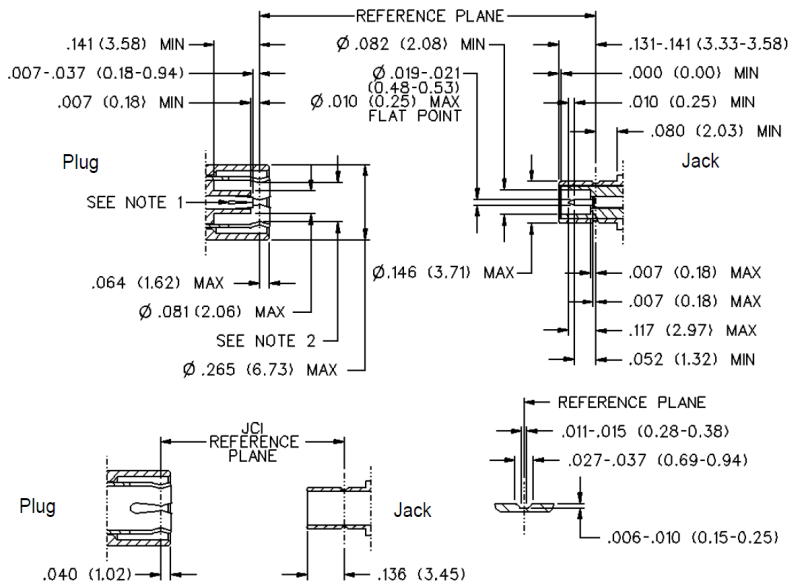
# 50 Ohm SMB PC Mount Straight Jack Receptacle



### Mounting Hole Layout



### Mating Engagement for SMB Series per MIL-C-39012



### NOTES

1. ID of contact to meet VSWR mating characteristics and connector durability when mated with a dia .019 / 0.53 male contact.
2. Must meet the force to engage and disengage when mated with mating part.

# 50 Ohm SMB PC Mount Straight Jack Receptacle



## Technical Specifications

### Electrical Ratings

<b>Impedance</b>	50 ohm		
<b>Frequency Range</b>	Connectors	0 - 4 GHz	
	Dummy Loads	0 - 1 GHz	
<b>VSWR (f = GHz)</b>		Straight Cabled	Right Angle Cabled
	RG-178 Cable	1.30 + .04f	1.45 + .06f
	RG-316, RG-58, .086 Semi Rigid Cable	1.25 + .04f	1.35 + 0.4f
	Adapters	1.20 + .04f	
	Uncabled Receptacles, Dummy Loads	N/A	
<b>Working Voltage (VRMS maximum)†</b>	Connectors for Cable Type	Sea Level	70,000 Feet
	RG-178	250	60
	RG-316, RG-58, .086 Semi Rigid, Uncabled Receptacles, Adapters	335	85
	Dummy loads	N/A	
<b>Dielectric Withstanding Voltage (VRMS minimum at Sea level)†</b>	Connectors for RG-178	750	
	Connectors for RG-316, RG-58, .086 Semi Rigid, Uncabled Receptacles, Adapters	1000	
	Dummy Loads	N/A	
<b>Corona Level (Volts minimum at 70,000ft)†</b>	Connectors for RG-178	185	
	Connectors for RG-316, RG-58, .086 Semi Rigid	250	
	Uncabled Receptacles, Adapters, Dummy Loads	N/A	
<b>Insertion Loss (dB maximum, tested at 1.5 GHz)</b>	Straight Cable Connectors	0.30 dB	
	Right Angle Cable Connectors	0.60 dB	
	Uncabled Receptacles, Adapters, Dummy Loads	N/A	
<b>Insulation Resistance</b>	1000 megohms minimum		
<b>Contact Resistance (milliohms max)</b>		Initial	After Environmental
	Center Contact (straight cabled connectors and uncabled receptacles)	6.0	8.0
	Center Contact (right angle cabled connectors and adapters)	12.0	16.0
	Outer Contact (Gold plated connectors)	1.0	1.5
	Outer Contact (Nickel plated connectors)	2.5	3.5
	Braid to Body (Gold plated connectors)	1.0	N/A
	Braid to Body (Nickel plated connectors)	2.5	N/A
<b>RF Leakage (dB minimum tested at 2.5 GHz)</b>	Cable Connectors	-55 dB	
	Uncabled Receptacles, Adapters, Dummy Loads	N/A	
<b>RF High Potential Withstanding Voltage (VRMS minimum, tested at 4 and 7 MHz)†</b>	Connectors for RG-178	500	
	Connectors for RG-316, RG-58	700	
	Uncabled Receptacles and Adapters	600	
	Dummy Loads	N/A	
<b>Power Rating (Dummy Load)</b>	0.5 watt @ +25°C, derated to 0.25 watt @ +125°C		

† Avoid user injury due to misapplication. See safety advisory definitions inside front cover.

# 50 Ohm SMB PC Mount Straight Jack Receptacle



## Mechanical Ratings

<b>Engagement Design</b>	MIL-C-39012, Series SMB		
<b>Engagement / Disengagement Force</b>	2lbs min to 14lbs max axial force		
<b>Contact Retention</b>	4lbs min axial force (captivated contacts)		
	1 inch-ounce min torque (uncabled receptacles)		
<b>Cable Retention</b>		Axial Force* (pounds)	Torque (in-oz)
	Connectors for RG-178	10	N/A
	Connectors for RG-316	20	N/A
	Connectors for RG-58	40	16
	Connectors for .086 Semi-Rigid	30	16
<b>Durability</b>	500 Cycles minimum		

\* Or cable breaking strength, whichever is less

## Environmental Ratings

(Meets or exceeds the applicable paragraph of MIL-C-39012)

<b>Temperature Range</b>	Connectors	-65°C to +165°C
	Dummy Loads	-65°C to +125°C
<b>Thermal Shock</b>	MIL-STD-202, Method 107, Condition B (N/A Dummy Loads)	
<b>Corrosion</b>	MIL-STD-202, Method 101, Condition B (N/A Dummy Loads)	
<b>Shock</b>	MIL-STD-202, Method 213, Condition B (N/A Dummy Loads)	
<b>Vibration</b>	MIL-STD-202, Method 204, Condition B (N/A Dummy Loads)	

## Material Specifications

<b>Bodies</b>	Brass per QQ-B-626 or Zinc per ASTM B86-71, Gold Plated** per MIL-G-45204 .00001 min or Nickel Plated per QQ-N-290
<b>Contacts</b>	Male - Brass per QQ-B-626, Gold Plated per MIL-G-45204 .00003" min. Female - Beryllium Copper per QQ-C-530, Gold Plated per MIL-G-45204 .00003" min
<b>Insulators</b>	PTFE Fluorocarbon per ASTM D 1710 and ASTM D 1457 or Teflon PFA 340
<b>Expansion Caps</b>	Brass per QQ-B-613, Gold Plated per MIL-G-45204 .00001" min. or Nickel Plated per QQ-N-290
<b>Crimp Sleeves</b>	Copper per WW-T-799, Gold Plated per MIL-G-45204 .00001" min. or Nickel Plated per QQ-N-290
<b>Mounting Hardware</b>	Brass (nuts) per QQ-B-626 or Phosphor Bronze (lockwashers) QQ-B-750, Gold Plated per MIL-G-45204 .00001" min. or Nickel Plated per QQ-N-290
<b>Cover Rings</b>	Phosphor Bronze per QQ-B-750, Gold Plated per MIL-G-45204 .00001 min. or Nickel Plated per QQ-N-290.

\*\* All gold plated parts include a .00005" min. nickel underplate barrier layer



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