SMP
Connectors

SMP Connectors

CHARACTERISTICS

Requirements	Specifications
General	
Material	Steel corrosion resistant per ASTM A-582, 300 Series, AMS 5567, AMS 5370 Brass Alloy per ASTM B-16 Beryllium copper per ASTM B-196 or B-197 PTFE Fluorocarbon per ASTM D-1457 Silicone Rubber per ZZ-R-765, CLASS IIB. 50-60 Shore.
Finish	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ASTM B-488, Type 2, code C over nickel underplate. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	The design shall be such that the outline dimensions in this catalog are met. In addition, the assembled connector shall meet the interface dimensions. Dimensions are reference only unless stated.
Electrical	
Insulation Resistance	The insulation resistance shall not be less than 5,000 megaohms.
Dielectric Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
RF High Potential Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
Contact Resistance	Refer to applicable military slash sheet or consult factory.
Voltage Standing Wave Ratio (VSWR)	Refer to applicable military slash sheet or consult factory.
RF Leakage	Refer to applicable military slash sheet or consult factory.
Insertion Loss	Refer to applicable military slash sheet or consult factory.
corona Level	Refer to applicable military slash sheet or consult factory.
Mechanical	
Force to Engage and Disengage	Engage; 15.0 lbs. max., Full Detent 5.0 lbs. max., Limited Detent 2.0 lbs. max., Smooth Bore and Catcher' Mitt Disengage; 5.0 lbs. min., Full Detent 1.5 lbs. min., Limited Detent 0.5 lbs. min., Smooth Bore and Catcher' Mitt
Misalignment	+/-.020 Radial, .000/.010 Axial
Cable Retention Force	Consult factory.
Mating Characteristics	Female only; 1/4 oz. min. withdrawal with .0140-.0000/+.0002 diameter pin.
Connector Durability	The connector to be and its mating connector shall be subjected to; 100 mating cycles min. for Full Detent; 500 mating cycles min. for Limited Detent; and 5000 mating cycles min. for Smooth Bore and Catcher' Mitt. The connector shall show no evidence of mechanical failure and the connector shall meet the mating characteristic requirements.
Environmental	
Vibration	Specification MIL-STD-202, Method 204, Test Condition D.
Shock	Specification MIL-STD-202, Method 213, Test Condition I.
Thermal Shock	Refer to applicable military slash sheet or consult factory.
Corrosion (Salt Spray)	Specification MIL-STD-202, Method 101, Test Condition B. No measurement at high humidity.
Moisture Resistance	Specification MIL-STD-202, Method 106. No measurement at high humidity. Insulation resistance shall be 200 megohms min. within 5 minutes after removal from humidity.

The specifications below are general specifications for all SMP connectors. Specific specifications for VSWR, insertion loss, and RF leakage for each connector is available from the factory upon request. Specifications in the following table are recommended for any procurement documents or drawings. In the event of any conflict between these specifications and DSCC 94007 and DSCC 98004, these specifications shall govern. These specifications are subject to change according to the latest revision of Specification DSCC 94007 and DSCC 98004.

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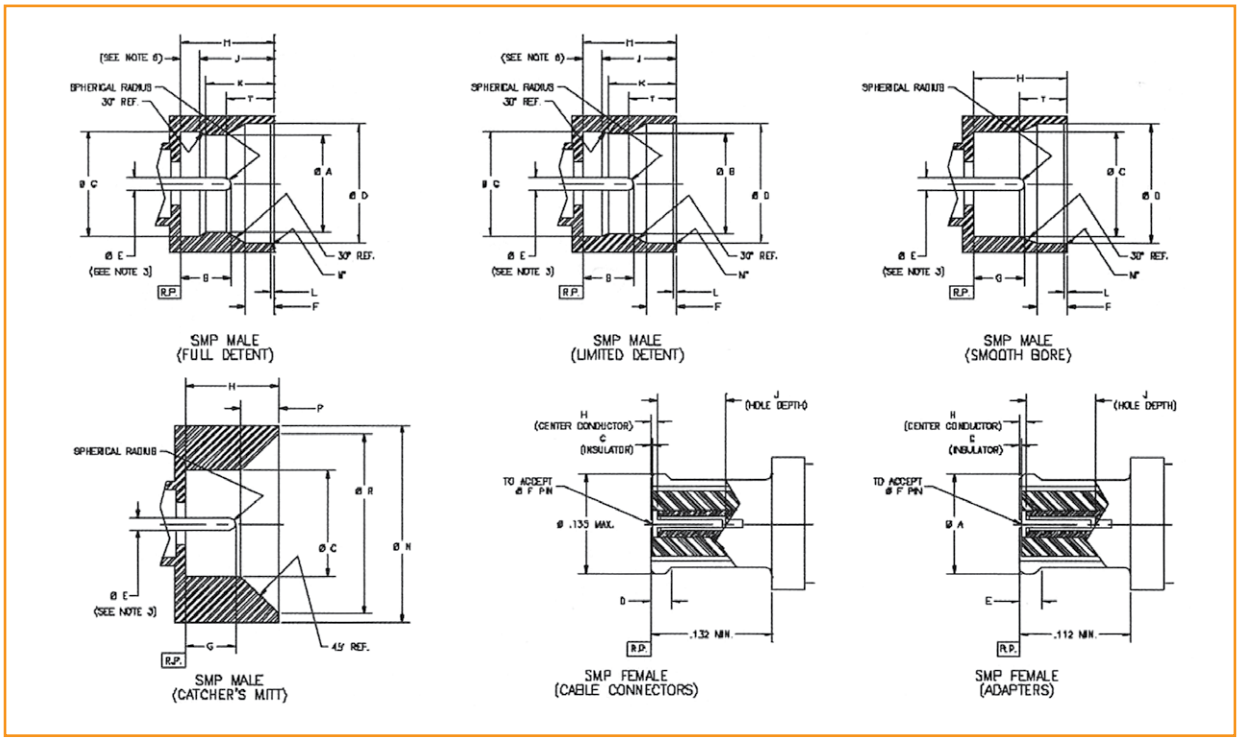
Interface Mating Dimensions (Per MIL-STD-348)



MALE

LTR	Minimum		Maximum	
	in	mm[2]	in	mm[2]
ØA	.114	2.90	.118	3.00
ØB	.118	3.00	.122	3.10
ØC	.123	3.12	.127	3.23
ØD	.139	3.53	.145	3.68
ØE	.014	0.36	.016	0.41
F	.033	0.84	.037	0.94
G	.045	1.14	.055	1.40
H	.108	2.74	.112	2.84
J	.086	2.18	.090	2.29
K	.078	1.98	.082	2.08
L	.003	0.08	---	---
M°	40°	40°	50°	50°
ØN	.230	5.84	.240	6.10
P	.043	1.09	.047	1.19
ØR	.210	5.33	.220	5.59
T	.055	1.40	.057	1.45

FEMALE

LTR	Minimum		Maximum	
	in	mm[2]	in	mm[2]
ØA	---	---	.135	3.43
B	.132	3.35	---	---
C	.112	2.84	---	---
D	.025	0.64	.035	0.89
E	.018	0.46	.025	0.64
ØF	.014	0.36	.016	0.41
G[4]	000	0.00	-.010	0.25
H[5]	.000	0.00	-.008	0.20
J	.070	1.78	---	---

Note(s);
1. Dimensions are inches.
2. Metric equivalents (to the nearest 0.01mm) are given for general information only and are based on 1 inch = 25.4 millimeters.
3. pin is not supplied with shroud.
4. Dielectric insulator gap is measured from connector body reference plane .000 in. max. above (flush) to .010 in. max. below.
5. Center conductor gap is measured from connector body reference plane .000 in. max. above (flush) to .010 in. max. below.
6. Dimension to mating interface shall be .018/.025 for adapters and .025/.035 for cable connectors.

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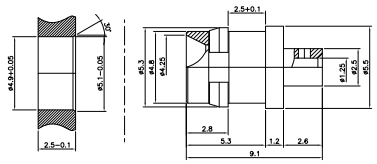
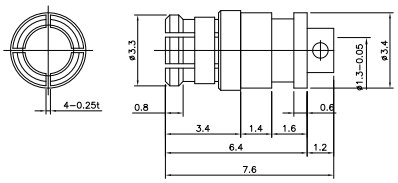
Straight Jack for UT047



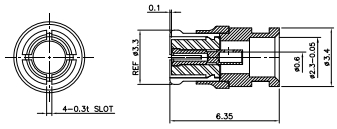
Part No.
SMP-100-001

Straight Plug for UT047



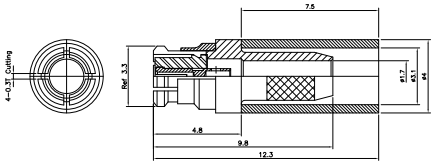
Part No.
SMP-100-004

Straight Plug for UT085



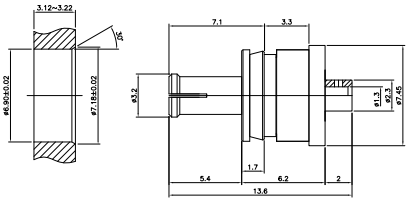
Part No.
SMP-101-001

Straight Plug for RG316



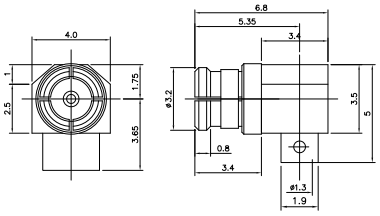
Part No.
SMP-111-001

Straight Plug for UT047



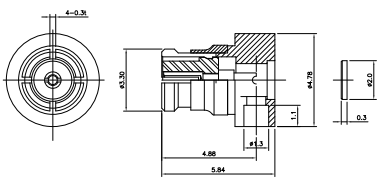
Part No.
SMP-200-001

Right Angle Plug for UT047



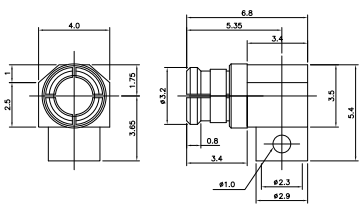
Part No.
SMP-300-001

Right Angle Plug for UT047



Part No.
SMP-300-002

Right Angle Plug for UT085



Part No.
SMP-301-001

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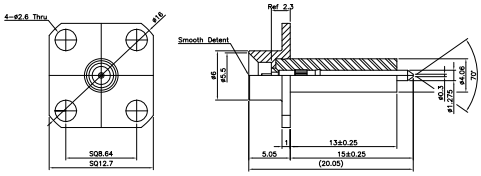
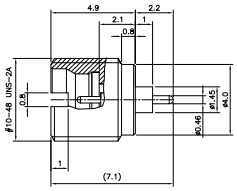
Panel Receptacle Jack-4Hole



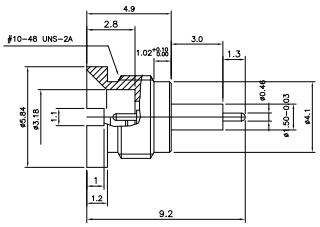
Part No.
SMP-504-001

Bulkhead Receptacle Jack



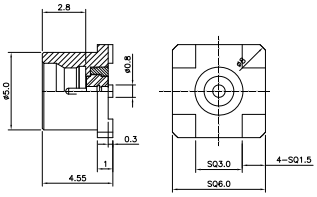
Part No.
SMP-505-002

Bulkhead Receptacle Jack



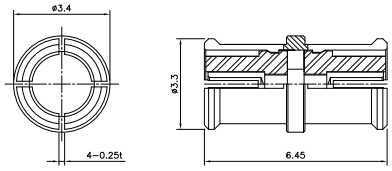
Part No.
SMP-505-004

Straight PCB Jack



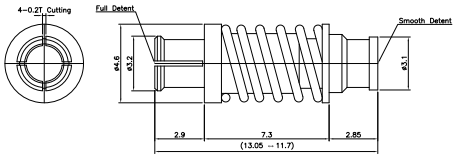
Part No.
SMP-601-002

Plug to Plug Adapter



Part No.
SMP-803-001

Plug to Plug Spring Adapter



Part No.
SMP-803-004

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