

INCH-POUND

MIL-PRF-39012/96A
w/AMENDMENT 2
15 July 2016
SUPERSEDING
MIL-PRF-39012/96A AMD 1
5 April 2002
MIL-PRF-39012/96A
24 September 1986

PERFORMANCE SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, ELECTRICAL, COAXIAL, RADIO FREQUENCY,
SERIES SMB (UNCABLED, MALE, PRINTED CIRCUIT, RIGHT ANGLE, CLASS 2)

This specification is approved for use by all Departments
and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall
consist of this specification sheet and MIL-PRF-39012.

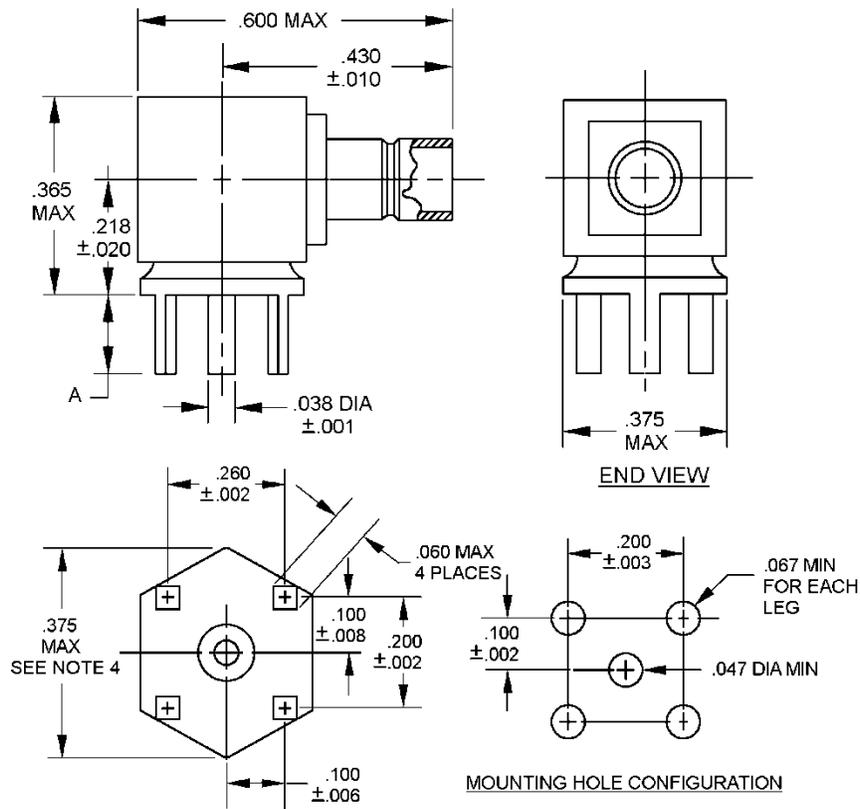


FIGURE 1. General configuration.

AMSC N/A

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Dash number		Dimension A
0001 (see note 6)	0004	.155 (3.94) ± .010 (.25)
0002 (see note 6)	0005	.125 (3.18) ± .010 (.25)
0003 (see note 6)	0006	.093 (2.38) ± .010 (.25)

INCHES	MM	INCHES	MM
.001	.02	.100	2.54
.002	.05	.200	5.08
.003	.08	.218	5.54
.008	.20	.367	9.32
.020	.51	.375	9.52
.038	.97	.385	9.78
.047	1.19	.430	10.92
.060	1.52	.600	15.24
.067	1.70		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. All undimensioned pictorial representations are for reference purposes only.
4. Configuration optional: dimension .375 (9.52 mm) is the maximum envelope diameter.
5. Not for NAVAIR use.
6. Connector bodies shall be gold-plated in accordance with ASTM B488, type II, code C, class 1.27.

FIGURE 1. General configuration – Continued.

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ENGINEERING DATA:

Nominal impedance: 50 ohms.

Frequency range: 0 to 4 GHz.

Voltage rating: 335 V rms maximum at sea level; 85 V rms maximum at 70,000 feet.

Temperature rating: -65° to +165°C.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Force to engage and disengage:

Longitudinal force: 14 pounds maximum engage, 2 pounds minimum disengage.

Torque: Not applicable.

Coupling proof torque: Not applicable.

Inspection conditions: Not applicable.

Mating characteristics: See figure 2 for dimensions.

Hermetic seal: Not applicable.

Leakage (pressurized connectors): Not applicable.

Insulation resistance: In accordance with MIL-STD-202-302, test condition B, 1,000 megohms minimum.

Center contact retention:

Minimum axial force. 6.0 pounds from mating end; 4.0 pounds from opposite end.

Torque: 3 inch-ounces.

Solderability: MIL-STD-202-208. For quality conformance inspection, the test shall be performed in group B following the insulation resistance test.

Salt atmosphere (corrosion): In accordance with MIL-STD-202-101, test condition B.

Voltage standing wave ratio (VSWR): Not applicable.

Swept frequency VSWR test setup: Not applicable.

Connector durability:

Insertion and withdrawal force:

500 cycles minimum at 12 cycles per minute maximum.

The mating force shall meet the mating characteristics requirements.

Initial: 14 pounds maximum.

Final: 14 pounds maximum engage and disengage, 2 pounds minimum disengagement.

Contact resistance: In milliohms maximum.

	Initial	After environment
Center contact	6.0	8.0
Outer contact	1.0	1.5
Braid to body	Not applicable	Not applicable

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Referenced documents. In addition to MIL-PRF-39012, this document references the following:

MIL-STD-202-101	MIL-STD-202-302	
MIL-STD-202-208	ASTM B488	

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5935-2016-101)

Review activities:

Army - AM, AT, AR, CR4, MI
Navy - AS, MC, OS, SA, SH
Air Force - 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.