

NOTE: The document identifier and heading has been changed on this page to reflect that this is a performance specification. There are no other changes to this document. The document identifier on subsequent pages has not been changed, but will be changed the next time the document is revised.

PERFORMANCE SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, ELECTRICAL, COAXIAL, RADIO FREQUENCY, SERIES SSMB, PRINTED CIRCUIT BOARD MOUNT, RIGHT ANGLE

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 the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-PRF-39012.

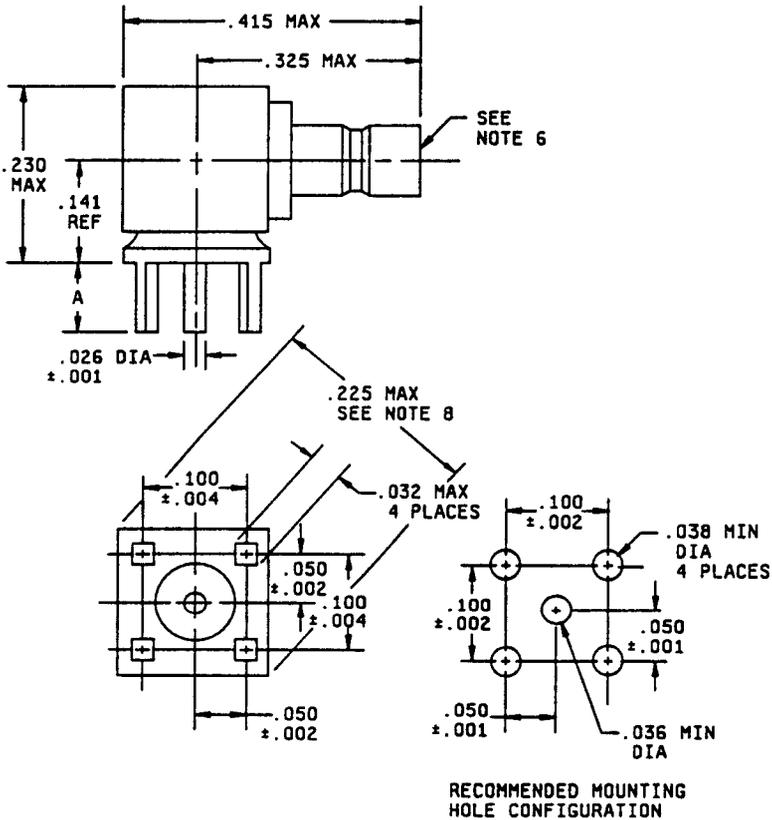


FIGURE 1. General configuration.

Dash number	Dimension A
0001 (see note 5)	.155 (3.94) $\pm$ .010 (0.25)
0002 (see note 5)	.125 (3.18) $\pm$ .010 (0.25)
0003 (see note 5)	.093 (2.36) $\pm$ .010 (0.25)
0004 (see note 7)	.155 (3.94) $\pm$ .010 (0.25)
0005 (see note 7)	.125 (3.18) $\pm$ .010 (0.25)
0006 (see note 7)	.093 (2.36) $\pm$ .010 (0.25)

Inches	mm	Inches	mm
.001	0.02	.050	1.27
.002	0.05	.100	2.54
.004	0.10	.218	5.54
.026	0.66	.221	5.61
.030	0.76	.385	9.78
.036	0.91	.435	11.05
.038	0.97	.600	15.24

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. All undimensioned pictorial configurations are for reference purposes only.
4. Unless otherwise specified, tolerances shall be  $\pm$ .005 (0.13 mm).
5. Connector bodies shall be gold plated in accordance with MIL-G-45204, type II, class I.
6. Series SSMB pin contact interface shall be in accordance with MIL-STD-348.
7. Connector bodies shall be silver plated in accordance with MIL-C-39012.
8. Configuration of base optional. Dimension .225 is the maximum envelope diameter.
9. The center contact shall be one piece or it shall be manufactured in such a way that it is not damaged during normal manufacturing operations when the connector is soldered to a printed wiring board.

FIGURE 1. General configuration - Continued.

## ENGINEERING DATA:

Nominal impedance: 50 ohms.

Frequency range: 0 to 12.4 GHz.

Voltage rating: 250 volts rms at sea level; 60 volts rms at 70,000 feet.

Temperature rating: -65°C to +165°C.

## REQUIREMENTS:

Dimensions and configuration: See figure 1 and MIL-STD-348.

Force to engage and disengage:

Longitudinal force: Not applicable.

Torque: Not applicable.

Coupling proof torque: Not applicable.

Inspection conditions: Not applicable.

Mating characteristics: See MIL-STD-348 for dimensions.

Hermetic seal: Not applicable.

Leakage (pressurized connectors): Not applicable.

Insulation resistance: Method 302, test condition B, MIL-STD-202; 1,000 megohms minimum.

Center contact retention: 2 pounds minimum axial force.

Solderability 1: Method 208 of MIL-STD-202.

Corrosion (salt spray): Method 101, test condition B, MIL-STD-202.

Voltage standing wave ratio (VSWR): Not applicable.

Connector durability: 500 cycles minimum at 12 cycles per minute maximum.

Initial: 6.0 pounds maximum engagement.

Final: 6.0 pounds maximum engage and disengage.  
1.0 pound minimum disengagement.

Contact resistance (in milliohms maximum).

	<u>Initial</u>	<u>After environment</u>
Center contact:	4.0	6.0
Outer contact:	1.0	1.5
Braid to body:	Not applicable	Not applicable

1 For quality conformance inspection, the test shall be performed in group B following the insulation resistance test; test 5 samples with no failures permitted.

Dielectric withstanding voltage: 500 volts rms at sea level.

Vibration, high frequency: Method 204, test condition B, MIL-STD-202, 15 g's.

Shock: Method 213, test condition B, MIL-STD-202, 75 g's at 6 milliseconds, 1/2 sine.

Thermal shock: Method 107, test condition B, MIL-STD-202.

Contact current rating: 1.0 ampere dc.

Moisture resistance: Not applicable.

Corona level: 125 V up to 75,000 feet.

RF high potential withstanding voltage:

Voltage and frequency: 400 volts rms at 5.0 MHz.

Leakage current: Not applicable.

Cable retention force: Not applicable.

Coupling mechanism retention force: Not applicable.

RF leakage: Not applicable.

Insertion loss: Not applicable.

Part or Identifying Number (PIN): M39012/135- (dash number from figure 1).

Group qualification: See table I.

NOTE: This specification sheet supersedes DESC drawing 86006 when a GPL source is obtained.

TABLE I. Group qualification and retention testing.

Group	Submission and qualification of any of the following connectors <sup>1/</sup>	Qualifies the following connectors
I	M39012/135-0001 M39012/135-0002 M39012/135-0003 M39012/141-0001 M39012/141-0002 M39012/141-0003	M39012/135-0001 M39012/135-0002 M39012/135-0003 M39012/141-0001 M39012/141-0002 M39012/141-0003
II	M39012/135-0004 M39012/135-0005 M39012/135-0006 M39012/141-0004 M39012/141-0005 M39012/141-0006	M39012/135-0004 M39012/135-0005 M39012/135-0006 M39012/141-0004 M39012/141-0005 M39012/141-0006

<sup>1/</sup> For qualification retention, where more than one part is listed in a group in this column, data may be supplied on any of these parts in order to retain qualification for those parts in the corresponding right hand column. The part used for qualification retention does not have to be the part initially qualified.

Revision letters are not used to denote changes due to the extensiveness of the changes.

CONCLUDING MATERIAL

Custodians:

Army - CR  
Navy - EC  
Air Force - 85  
NASA - NA

Preparing activity:

DLA - ES

Review activities:

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

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