

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.

INCH-POUND

MIL-PRF-39012/128B
19 September 1989
SUPERSEDING
MIL-C-39012/128A
24 September 1986

PERFORMANCE SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, ELECTRICAL, COAXIAL, RADIO FREQUENCY,
(SERIES BNC, SOLDER POCKET, SOCKET CONTACT
JAM NUT MOUNTED, ISOLATED, 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 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.

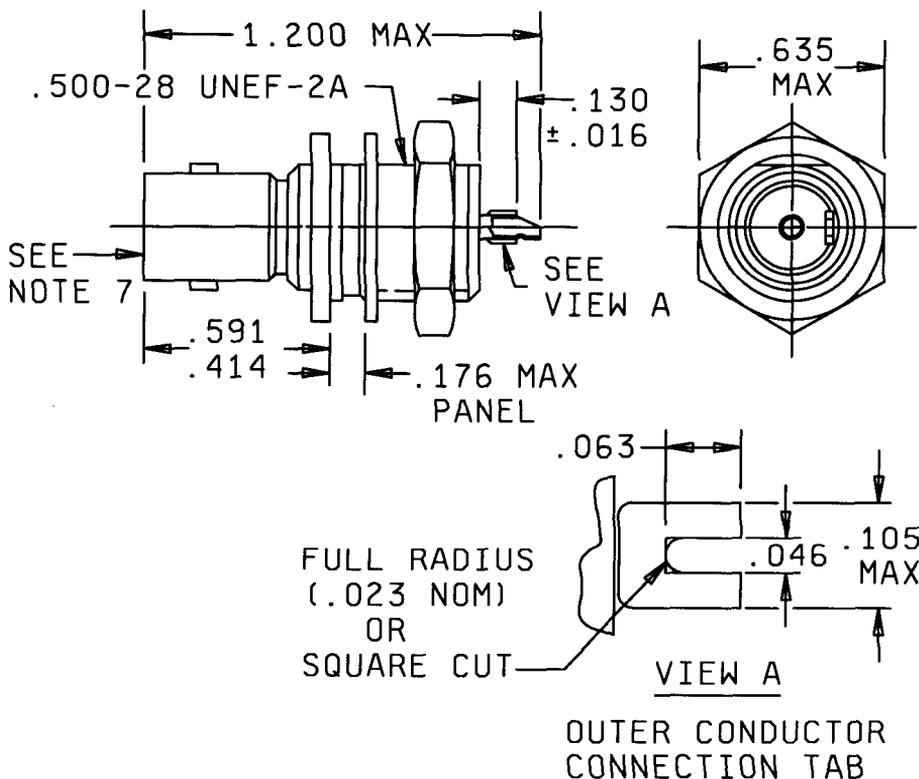
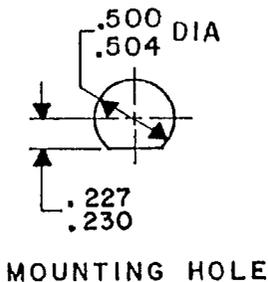
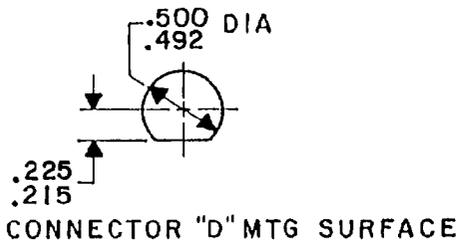


FIGURE 1. General configuration.



Inches	mm	Inches	mm
.016	0.41	.227	5.77
.023	0.58	.230	5.84
.046	1.17	.414	10.52
.063	1.60	.492	12.45
.105	2.67	.500	12.70
.130	3.30	.504	12.80
.176	4.47	.591	15.01
.215	5.46	.635	16.13
.225	5.72	1.200	30.48

M 39012 / 128 - 0001

- NOTES:
1. Dimensions are in inches.
 2. Metric equivalents are given for general information only.
 3. Unless otherwise specified, all tolerances are ± 0.005 (0.13 mm) inches.
 4. Wrench flats are to accommodate standard wrench openings in accordance with FED-STD-H28, appendix 10.
 5. All undimensioned pictorial configurations are for reference purposes only.
 6. Solder pocket shall accommodate a wire of .059 (1.50 mm) diameter maximum.
 7. Series BNC, socket contact interface in accordance with MIL-STD-348.

FIGURE 1. General configuration - Continued.

ENGINEERING DATA:

Nominal impedance: 50 ohms.

Frequency range: 0 to 4,000 MHz.

Voltage rating: 500 volts rms, maximum working voltage at sea level. 125 volts rms, maximum at 70,000 feet.

Temperature rating: -65°C to +165°C.

REQUIREMENTS:

Dimensions and construction: See figure 1.

Center contacts:

Axial force: 4 lbs, minimum.

Radial torque: 4 inch-ounces, minimum.

Isolating insulator captivation: Forces shall be applied between the mounting bushing and connector body for a period of 10 seconds, minimum.

Torque: 15 inch-pounds.

Axial force: 30 pounds.

Force to engage and disengage:

Longitudinal force: 3 pounds, maximum.

Torque: 2-1/2 inch-pounds, maximum.

Coupling proof torque: Not applicable.

Inspection conditions (coupling torque): Not applicable.

Mating characteristics: Reference MIL-STD-348.

Center contact (socket):

Oversize test pin: .057 diameter, minimum (nonclosed entry contacts only).

Insertion depth: .125, minimum.

Number of insertions: One.

Insertion force test: Steel test pin diameter .054, minimum.

Test pin finish: 16 microinches.

Insertion force: 2 pounds, maximum.

Withdrawal force test: Steel test pin diameter .052, maximum.

Withdrawal force: 2 ounces, minimum.

Test pin finish: 16 microinches.

Hermetic seal: Not applicable.

Leakage (pressurized connectors): Not applicable.

Insulation resistance: Method 302, test condition B of MIL-STD-202. 5,000 megohms minimum.

Contact resistance (In milliohms maximum):

	<u>Initial</u>	<u>After environment</u>
Center contact	1.5	2.0
Outer contact	.2	Not applicable

Resistance to test prod change: Not applicable.

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

Voltage standing wave ratio (VSWR): Not applicable.

Dielectric withstanding voltage: Method 301 of MIL-STD-202. 1,500 volts rms, minimum at sea level.

Connector durability: 500 cycles minimum, at 12 cycles per minute, maximum. The connector shall meet the mating characteristics and force to engage and disengage requirements.

Vibration, high frequency: Method 204, test condition B of MIL-STD-202. No discontinuity permitted.

Shock: Method 213, test condition G of MIL-STD-202. No discontinuity permitted.

Thermal shock: Method 107, test condition B of MIL-STD-202, except test high temperature shall be +85°C. High temperature shall be +200°C for connectors using +200°C cables.

Moisture resistance: Method 106 of MIL-STD-202. No measurements at high humidity. Insulation resistance shall be at least 200 megohms within 5 minutes after removal from humidity. Dielectric withstanding voltage shall be met. Voltages shall be applied at points suitable for testing each individual insulator.

Corona level:

Voltage: 375 volts, minimum.

Altitude: 70,000 feet.

RF high potential withstanding voltage:

Voltage and frequency: 1,000 volts rms, at a frequency between 5 and 7.5 MHz.

Leakage current: Not applicable.

Cable retention force: Not applicable.

RF leakage: Not applicable.

RF insertion loss: Not applicable.

Isolation: The following tests shall be accomplished after the shock test to verify isolation. Voltages shall be applied at two points suitable for testing only the insulator providing the isolation.

Insulation resistance, method 302, test condition B of MIL-STD-202.
5,000 megohms, minimum.

Dielectric withstanding voltage: Method 301 of MIL-STD-202, 1,500 volts rms, minimum.

Part or Identifying Number (PIN): M39012/128-C001.

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

Review activities:

Army - MI
Navy - SH
Air Force - 11, 99
DLA - ES

User activities:

Army - AR, AT, ME
Navy - AS, MC, OS
Air Force - 19

Preparing activity:

Army - CR

Agent:

DLA - ES

(Project 5935-3721)