

INCH-POUND

MIL-PRF-39012/32B  
 14 August 2016  
 SUPERSEDING  
 MIL-PRF-39012/32A  
 11 January 1973

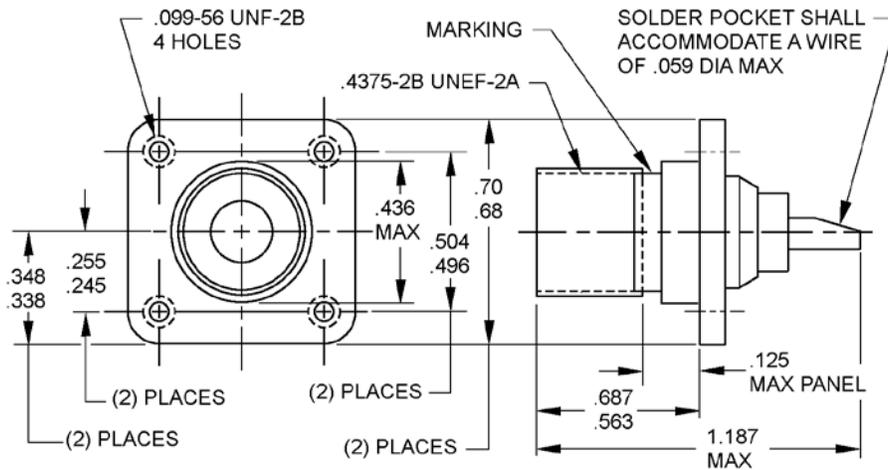
PERFORMANCE SPECIFICATION

CONNECTORS, COAXIAL, RADIO FREQUENCY

(SERIES TNC (UNCABLED – RECEPTACLE, SOCKET, FLANGE MOUNTED, 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.



INCH	MM	INCH	MM
.059	1.50	.4375	11.11
.099	2.51	.496	12.60
.125	3.18	.504	12.80
.245	6.22	.563	14.30
.255	6.48	.68	17.27
.338	8.59	.687	17.45
.348	8.84	.70	17.78
.436	11.07	1.187	30.15

NOTES:

1. Dimensions are in inches. Metric equivalents are given for general information only.
2. Receptacle not recommended for use on panels with greater than .078 (1.98 mm) maximum thickness.
3. All undimensioned pictorial configurations are for reference purposes only.
4. There shall be a solid barrier in the socket between the pin entry and the solder pocket to prevent solder wicking.

FIGURE 1. General configuration.



TABLE I. Group qualification.

Group	Submission and qualification of any of the following connectors	Qualifies the following connectors
I	/32-0001 /31-0001 /31-0002	/32-0001 /31-0001 /31-0002

ENGINEERING DATA:

Nominal impedance: 50 ohms.

Frequency range: 0 to 11,000 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 configuration: See figure 1.

Force to engage and disengage:  
Longitudinal force – Not applicable.  
Torque – 2 inch-pounds maximum.

Coupling proof torque: Not applicable.

Inspection conditions:  
Coupling torque – 4 to 6 inch pounds.

Mating characteristics: See MIL-STD-348.  
Center contact (female):  
Oversize test pin - .057 diameter minimum (nonclosed entry contacts only).  
Insertion depth - .125 minimum.  
Number of insertions – 1.

Insertion force test – Steel test pin dia .054 minimum.  
Test pin finish – 16 microinches.  
Insertion force – 2 pounds maximum.

Withdrawal force test: Steel test pin dia .052 maximum.  
Withdrawal force – 2 oz. minimum.  
Test pin finish – 16 microinches.

Hermetic seal: Not applicable.

Leakage (pressurized connectors): Not applicable.

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

Center contact retention:  
6 lbs minimum axial force.  
4 inch-ounces radial torque minimum.

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

Voltage standing wave ratio (VSWR): Not applicable.

Connector durability: 500 cycles at 12 cycles/minute maximum. The connectors shall meet the mating characteristic and force to engage and disengage requirements.

Contact resistance: In milliohms maximum.

	Initial	After environment
Center contact	1.5	2.0
Outer contact	.2	Not applicable

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

Vibration, high frequency: MIL-STD-202-204, test condition B.

Shock: MIL-STD-202-213, test condition I.

Temperature cycling: MIL-STD-202-107, test condition B, except test high temperature shall be +200°C.

Thermal shock: Not applicable.

Moisture resistance: MIL-STD-202-106. No measurements at high humidity. Insulation resistance shall be at least 200 megohms within 5 minutes after removal from humidity.

Corona level:

Voltage – 375 volts, minimum.

Altitude – 70,000 feet.

RF high potential withstanding voltage:

Voltage and frequency: 1,000 volts rms minimum at 5 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 number: M39012/32-0001.

Changes from previous issues. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

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

MIL-STD-202-101  
MIL-STD-202-106  
MIL-STD-202-107  
MIL-STD-202-204  
MIL-STD-202-213  
MIL-STD-202-301  
MIL-STD-202-302  
MIL-STD-348

#### CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA – CC

(Project 5935-2016-088)

Review activities:

Army – AM, AT, CR4, MI  
Navy – AS, MC, OS, 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>.