

INCH-POUND

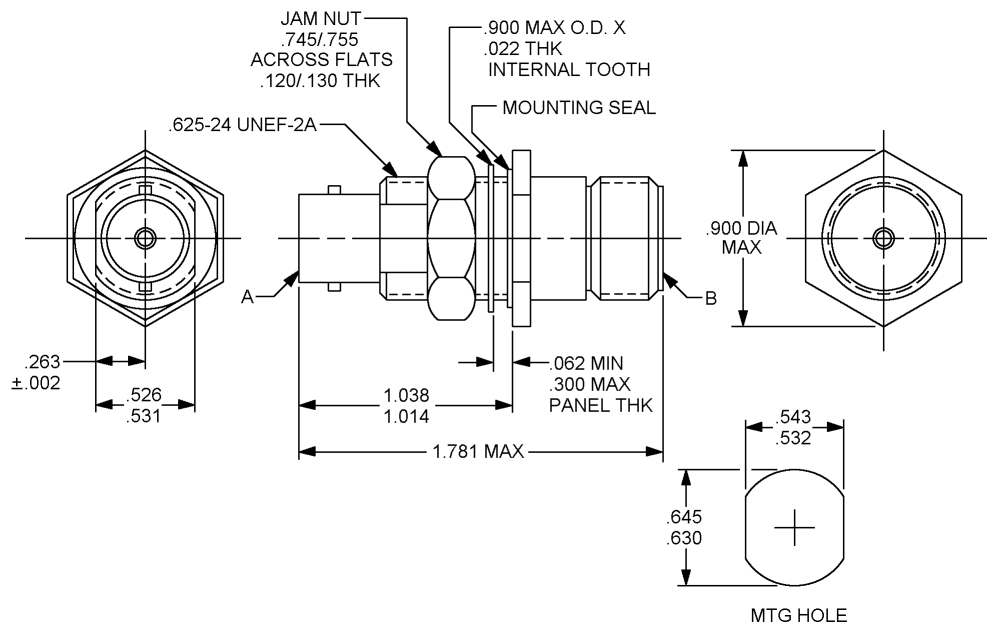
MIL-PRF-55339/25C
w/AMENDMENT 1
12 May 2023
SUPERSEDING
MIL-PRF-55339/25C
17 September 2004

PERFORMANCE SPECIFICATION SHEET

ADAPTER, CONNECTOR, COAXIAL, RADIO FREQUENCY, IN-LINE, JAMNUT MOUNTED, (BETWEEN SERIES BNC JACK TO SERIES N JACK), CLASS 2

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

The requirements for acquiring the document described herein shall
consist of this specification sheet and MIL-PRF-55339.



Reference	Series	Contact
A	BNC	Socket
B	N	Socket

NOTES:

1. Dimensions are in inches.
2. All undimensioned pictorial representations are for reference purposes only.
3. Interfaces shall be in accordance with MIL-STD-348, series BNC socket contact and series N socket contact.

FIGURE 1. General configuration.

DESIGN AND CONSTRUCTION

General configuration: See figure 1.

Impedance: 50 ohms, nom.

Working voltage: Sea level – 500 V rms.
70,000 feet (4.437 kPa) – 125 V rms.

Frequency range: 0 to 4 GHz.

Temperature range: -65° to +165°C.

PERFORMANCE (installation torque of 6 to 10 in. lb (0.68 to 1.13 Nm), series N)

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

Center contact retention:

	<u>Series BNC</u>	<u>Series N</u>
Axial force (pounds, minimum)	6 (26.7 N)	6 (26.7 N)
Torque (ounce-inch, minimum)	N/A	N/A

Force to engage and disengage:

	<u>Series BNC</u>	<u>Series N</u>
Longitudinal force (pounds, maximum)	3.0 (13.3 N)	N/A
Torque (inch-pounds, maximum)	2.5 (0.34 Nm)	6.0 (0.68 Nm)

Coupling proof torque: Not applicable.

Mating characteristics:

Center contact (socket):

	<u>Series BNC</u>	<u>Series N</u>
Oversize test pin diameter (inch, minimum):	.057	.074
Insertion depth (inch, minimum)	.125	.125
Number of insertions	1	1
Maximum test pin (insertion force test):		
Steel test pin diameter (inch, minimum)	.054	.066
Pin finish (microinches)	16	16
Insertion force (pounds, maximum)	2(8.89 N)	2 (8.89 N)
Number of insertions	1	1
Minimum test pin (withdrawal force):		
Steel test pin diameter (inch, minimum)	.052	.063
Pin finish (microinches)	16	16
Withdrawal force (ounces, minimum)	2 (0.56 N)	2 (0.56 N)
Number of withdrawals	1	1

Outer contact: Not applicable.

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Permeability: < 2.0.

Seal: Hermetic – Not applicable.

Pressurized – 30 psi (207 kPa) minimum.

Weatherproof – 30 lbf/in² (207 kPa).

Insulation resistance: 5,000 megohms, minimum.

Voltage standing wave ratio (VSWR): 1.30, max .5 to 4 GHz.

RF leakage (total): -55 dB, min, 2 to 3 GHz.

RF insertion loss: .2 dB, max, 3 GHz ($.012\sqrt{F \text{ (GHz)}} \text{ dB}$ max tested at 3 GHz).

Durability: 500 cycles minimum at 12 cycles/min max. The connector shall meet the mating characteristics and force to engage and disengage requirements.

Dielectric withstanding: Test voltage – 1,500 V rms, minimum (sea level).

Contact resistance (milliohms, max).

<u>Contact</u>	<u>Initial</u>	<u>After</u>
Center	2.0	2.5
Outer	0.2	N/A
Outer (-70001)	0.4	N/A

Vibration, high frequency: Interruptions – 1 microsecond (μs), maximum.

Shock: Test condition I.

Thermal shock: Test condition C.

Moisture resistance: 200 megohms, minimum.

Corona level:

Voltage – 375 V, minimum.

Altitude - 70,000 feet (4.437 kPa), minimum.

RF high potential withstanding voltage:

RF voltage – 1,000 V rms, minimum.

Frequency – 5 MHz, minimum.

Salt spray (corrosion): Applicable.

Coupling mechanism retention force: Not applicable.

Part or Identifying Number (PIN): M55339/25-00606.

PIN: M55339/25-70001. CAUTION: THIS PART HAS A NICKEL PLATED BODY AND IS NOT FOR USE IN APPLICATIONS WHERE PASSIVE INTERMODULATION GENERATION (PIM) MAY BE A CONCERN.

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Cross reference: See table I.

TABLE I. Cross reference of PINs.

PIN	Superseded PIN or type designation ^{1/}
M55339/25-00606	51C12929 UG-606/U

^{1/} The superseded PIN or the type designation is for cross reference only. Where a superseded PIN or type designation is not given, none was assigned or will be assigned. PIN M55339/25-00606 shall be used in all cases for marking and identifying the adapter.

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-55339, this document references the following:

MIL-STD-348

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:
DLA - CC

(Project 5935-2022-222)

Review activities:

Army – AR, AT, EA
Navy – AS, MC, OS
Air Force – 19

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>.