

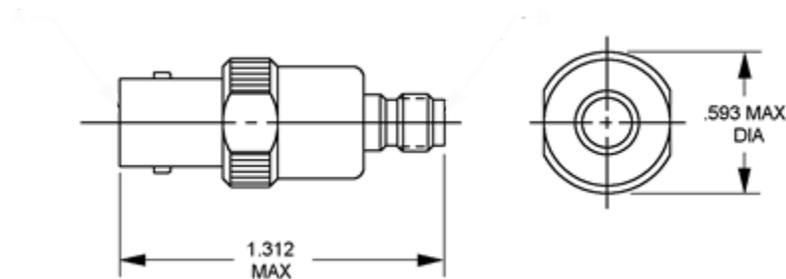
INCH-POUND
MIL-PRF-55339/46B
28 January 2015
SUPERSEDING
MIL-PRF-55339/46A
28 February 1979

PERFORMANCE SPECIFICATION

ADAPTER, CONNECTOR, COAXIAL, RADIO FREQUENCY, IN-LINE,
(BETWEEN SERIES SMA JACK TO SERIES BNC JACK), 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-55339.



Inches	mm
.593	15.06
1.312	33.32

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. Interface shall be in accordance with MIL-STD-348.

FIGURE 1. General configuration.



ENGINEERING DATA:

General configuration: See figure 1.

Impedance: 50 ohms, nom.

Working voltage: Sea level – 335 V rms. 70,000 feet – 85 V rms.

Frequency range: 0 to 4 GHz.

Temperature range: -65° to +165°C.

REQUIREMENTS: (installation torque 4 to 6 in. lbs).

Dimensions: See figure 1.

Center contact retention: Axial force – 6 lb, min. Torque – Not applicable.

Force to engage and disengage	Series BNC	Series SMA
Longitudinal force –	3	Not applicable
Torque – (in. lb, max)	2.5	2

Mating characteristics:

	Series BNC	Series SMA
Center contact (socket):		
Oversize test pin dia (in min)	.057	.0375 + .0001
Pin finish (microinches)	16	16
Insertion depth (in. min)	.125	.030/.045
No. of insertions	1	3
Max test pin (insertion force test):		
Steel test pin dia (in. min)	.054	.0370 + .0001
Pin finish (microinches)	16	16
Insertion force (lb, max)	2	3
Insertion depth	--	.050/.075
No. of insertions	1	1
Min test pin (withdrawal force):		
Steel test pin dia (in. max)	.052	.0355 - .0001
Pin finish (microinches)	16	16
Withdrawal force (oz, min)	2	1
Insertion depth	--	.050/.075
No. of withdrawals	1	3

Permeability: <2.0.

Seal:

Pressurized – Not applicable.

Weatherproof – Not applicable.

Insulation resistance: 5,000 megohms, min.

VSWR: 1.30 max at .5 to 4.0 GHz.

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

RF insertion loss: .2 dB, max, 3 GHz ($.115 \sqrt{F}$ (GHz) dB max tested at 3 GHz).

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

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

Contact resistance (milliohms, max):

Contact	Initial	After
Center	4.1 ^{1/}	6.0
Outer	2.2	Not applicable

^{1/} Two center contacts must be mated to the center conductor under test, therefore doubling “center contact” resistance.

Vibration, high frequency: Method 204, MIL-STD-202, test condition D, interruptions – 1 μs, maximum.

Shock (specified pulse): Method 213, MIL-STD-202, test condition I.

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

Moisture resistance: 200 megohms, min.

Corona level: Voltage – 250 V, min. Altitude – 70,000 feet, min.

RF high potential withstanding voltage: RF voltage – 670 V rms, min. Frequency – 5 MHz, min.

Salt spray (corrosion): Test condition B.

Marking: As specified in MIL-PRF-55339.

Part or Identifying Number (PIN):

M55339/46-30001
M55339/46-50001

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-55339, this document references the following:

MIL-STD-202
MIL-STD-348

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-2015-025)

Review activities:

Army - AR, AT, EA, 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 information above using the ASSIST Online database at <https://assist.dla.mil>.