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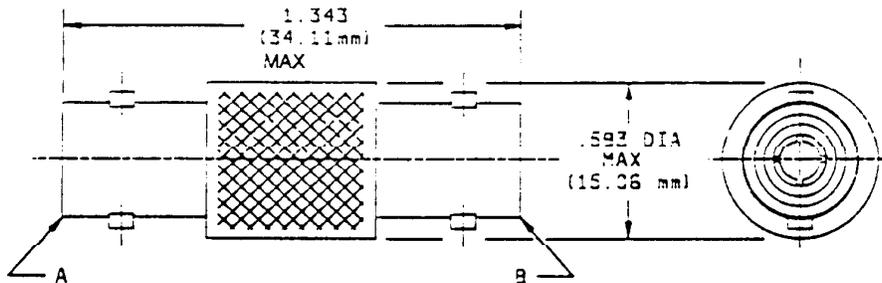
MIL-PRF-55339/16
 6 May 1975
 SUPERSEDING
 MG35104D
 25 February 1968

PERFORMANCE SPECIFICATION

ADAPTER, CONNECTOR, COAXIAL, RADIO FREQUENCY,
 (WITHIN SERIES BNC), CLASS 2, STRAIGHT PLUG

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

The complete requirements for procuring the adapters described herein shall consist of this specification and the latest issue of Specification MIL-PRF-55339.

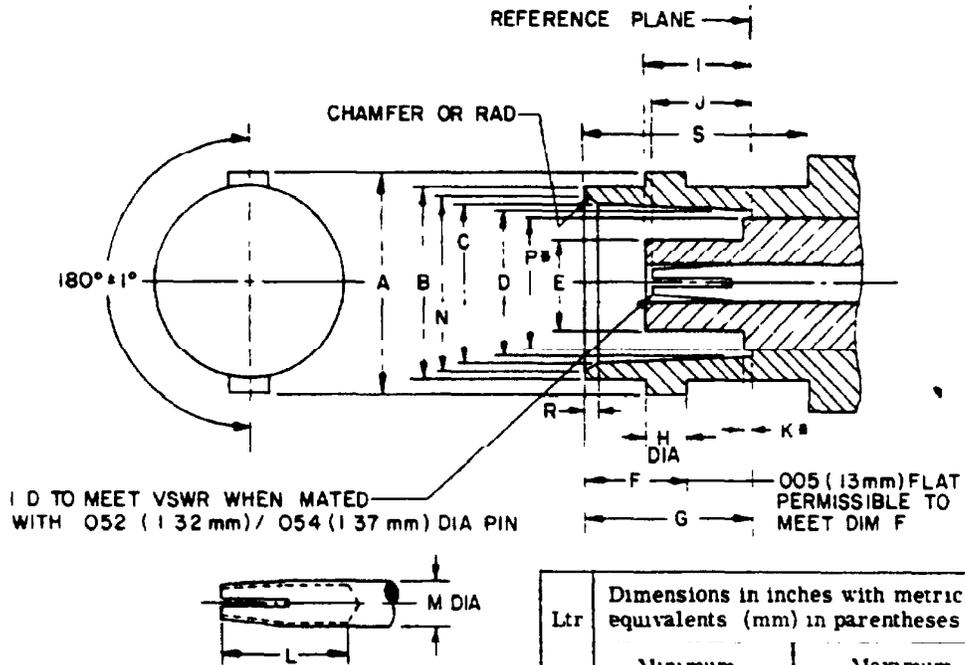


Reference	Series	Contact	Figure
A & B	BNC	Socket	2

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are in parentheses.
3. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
4. All undimensioned pictorial representations are for reference purposes only.

FIGURE 1. General configuration.



Ltr	Dimensions in inches with metric equivalents (mm) in parentheses	
	Minimum	Maximum
A	.432(10.97)	.436(11.07)
B	.378(9.60)	.382(9.70)
C	.327(8.31)	.333(8.46)
D	.319(8.10)	.321(8.15)
E	- - -	.186(4.72)
F	.204(5.18)	.208(5.28)
G	.327(8.31)	.335(8.51)
H	.075(1.91)	.081(2.06)
I	- - -	.208(5.28)
J	.190(4.83)	.206(5.23)
K*	- - -	.006(.15)
L	.195(4.95)	- - -
M	.081(2.06)	.087(2.21)
N	.346(8.79)	.356(9.04)
P*	- - -	.256(6.50)
R	.015(.38)	.030(.76)
S	.414(10.52)	- - -

P dimension applies to that portion (if applicable) of dielectric which extends beyond reference plane by dimension K

NOTES:

1. Dimensions are in inches.
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm
3. Concave depression .100 (2.54 mm) x .005 (.13 mm) deep between studs permissible.
4. All undimensioned pictorial representations are for reference purposes only

FIGURE 2. Mating dimensions for socket contact terminations.

DESIGN AND CONSTRUCTION:

General configuration: See figure 1.

Impedance: 50 ohms, nom

Working voltage: Sea level - 500 Vrms.
70,000 feet - 125 Vrms.

Frequency range: 0 to 4 GHz.

Temperature range: -65° to +165°C

PERFORMANCE (installation torque is not applicable).

Dimensions: See figures 1 and 2.

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

Force to engage and disengage: Longitudinal force - 3 lb, max.
Torque - 2.5 in. lb, max.

Coupling proof torque: Not applicable.

Mating characteristics:

Center contact (socket):

Oversize test pin dia - .057 in., min.
Insertion depth - .125 in., min.
No. of insertions - 1.

Max test pin (insertion force test):

Steel test pin dia - .054 in., min.
Pin finish - 16 microinches.
Insertion force - 2 lb, max.
No. of insertions - 1.

Min test pin (withdrawal force):

Steel test pin dia - .052 in., max.
Pin finish - 16 microinches.
Withdrawal force - 2 oz, min.
No. of withdrawals - 1

Outer contact. Not applicable.

Permeability: <2.0.

Seal: Hermetic - Not applicable.

Pressurized - Not applicable.

Weatherproof - Not applicable.

Insulation resistance: 5,000 megohms, min.

VSWR. 1.25:1, max at .5 to 4 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, min.

Rate. 12 c/m, min.

Dielectric withstanding. Test voltage - 1,500 Vrms, min (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

Vibration, high frequency: Interruptions - 1 μ s, max.

Shock: Test condition I.

Thermal shock Test condition C.

Moisture resistance: 200 megohms, min.

Corona level: Voltage - 375 V, min.
Altitude - 70,000 feet, min.

RF high potential withstanding voltage: RF voltage - 1,000 Vrms, min.
Frequency - 5 MHz, min.

Salt spray (corrosion): Applicable.

Coupling mechanism retention force: Not applicable.

MARKING: As specified in MIL-A-55339.
Part No. M55339/16-00914.

TABLE I. Cross reference of part numbers.

Part number	Superseded part number or type designation <u>1/</u>
M55339/16-00914	MS35184 UG-914/U

1/ The superseded part number or the type designation is for cross reference only. Where a superseded part number or type designation is not given, none was assigned or will be assigned. The part number M55339/16-00914 shall be used in all cases for marking and identifying the adapter.

Custodians:
Army - EL
Navy - EC
Air Force - 85

Review activities:
Army - MU, MI, EL
Navy - SH
Air Force - 11, 80
DSA - ES

User activities:
Army - AT
Navy - AS, MC
Air Force - 19

Preparing activity:
Army - EL

Agent:
DSA - ES

(Project 5935-1918-14)

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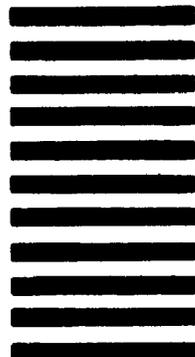


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