

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 this document is revised.

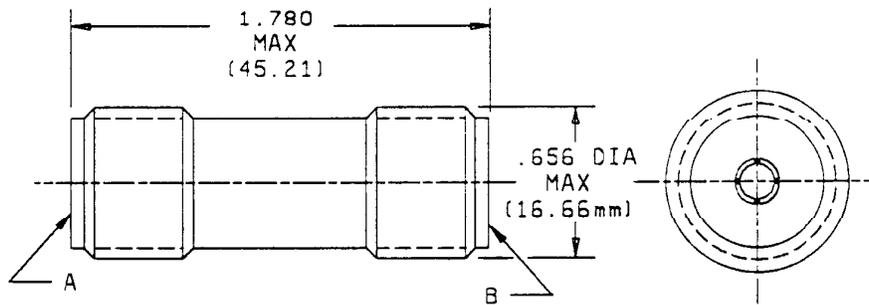
MIL-PRF-55339/7
 6 May 1975
 SUPERSEDED BY
 MS90576
 11 July 1968

PERFORMANCE SPECIFICATION

ADAPTER, CONNECTOR, COAXIAL, RADIO FREQUENCY,
 (WITHIN SERIES N), 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 adapter described herein shall consist of this specification and the latest issue of Specification MIL-PRF-55339.

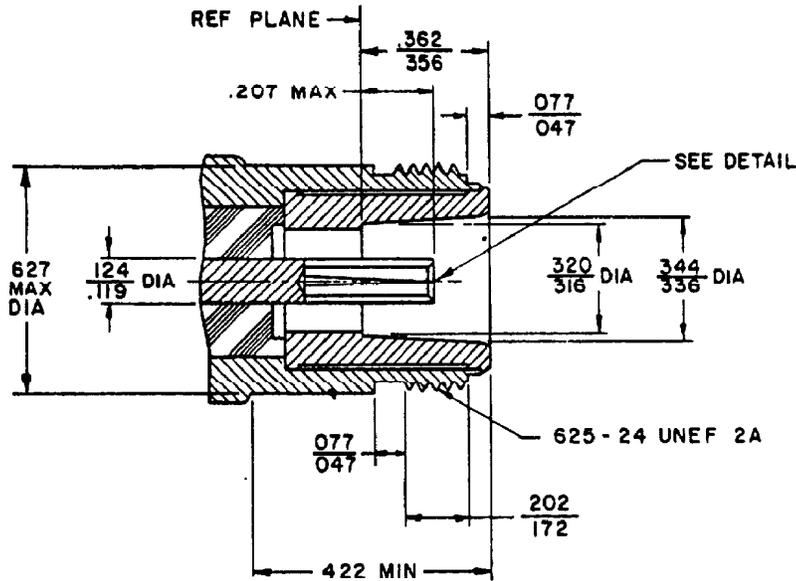


Reference	Series	Contact	Figure
A & B	N	Socket	2

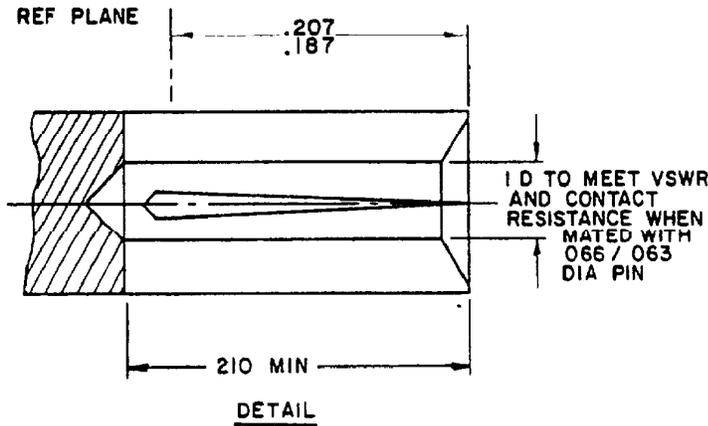
NOTES:

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.



INCHES	MM
.047	1.19
.063	1.60
.066	1.68
.077	1.96
.119	3.02
.124	3.15
.172	4.37
.187	4.75
.202	5.13
.207	5.26
.316	8.03
.320	8.13
.336	8.53
.344	8.74
.356	9.04
.362	9.19
.422	10.72
.625	15.88
.627	15.93



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. Slitting of inner contact optional.
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 - 1,000 Vrms.
70,000 feet - 250 Vrms.

Frequency range: 0 to 11 GHz.

Temperature range: -65° to +165°C.

PERFORMANCE (installation torque of 6 to 10 in. lb).

Dimensions: See figures 1 and 2.

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

Force to engage and disengage: Longitudinal force - Not applicable.
Torque - 6 in. lb, max.

Coupling proof torque: Not applicable.

Mating characteristics:

Center contact (socket):

Oversize test pin dia - .074 in., min.

Insertion depth - .125 in., min.

No. of insertions - 1.

Max test pin (insertion force test):

Steel test pin dia - .066 in., min.

Pin finish - 16 microinches.

Insertion force - 2 lb, max.

No. of insertions - 1.

Min test pin (withdrawal force):

Steel test pin dia - .063 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: 1.30, max at .5 to 11 GHz.

RF leakage (total): -90 dB, min, 2 to 3 GHz.

RF insertion loss: .15 dB, max, 9 GHz
(.050 \sqrt{F} (GHz) dB max tested at 9 GHz).

Durability: 500, min.

Rate: 12 c/m, min.

Dielectric withstanding: Test voltage - 2,500 Vrms, min (sea level).

Contact resistance (milliohms, max):

<u>Contact</u>	<u>Initial</u>	<u>After</u>
Center	1.5	2
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 - 500 V, min.
Altitude - 70,000 feet, min.

RF high potential withstanding voltage: RF voltage - 1,500 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. M55339/07-00029.

TABLE I. Cross reference of part numbers.

Part number	Superseded part number or type designation <u>1/</u>
M55339/07-00029	MS90576 RE49D258E UG-29C/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 M55339/07-00029 shall be used in all cases for marking and identifying the adapter.

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

Preparing activity:
Army - EL

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

Agent:
DSA - ES
(Project 5935-1918-5)

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

To detach this form, along this line

SPECIFICATION ANALYSIS SHEET		Form Approved Budget Bureau No 22-R255
INSTRUCTIONS. This sheet is to be filled out by personnel, either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.		
SPECIFICATION MIL-A-55339/7 ADAPTER CONNECTOR, COAXIAL, RADIO FREQUENCY, (WITHIN SERIES N), CLASS 2, STRAIGHT PLUG		
ORGANIZATION		
CITY AND STATE		CONTRACT NUMBER
MATERIAL PROCURED UNDER A <input type="checkbox"/> DIRECT GOVERNMENT CONTRACT <input type="checkbox"/> SUBCONTRACT		
1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE? A. GIVE PARAGRAPH NUMBER AND WORDING		
B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES		
2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID		
3. IS THE SPECIFICATION RESTRICTIVE? <input type="checkbox"/> YES <input type="checkbox"/> NO (If "yes", in what way?)		
4. REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)		
SUBMITTED BY (Printed or typed name and activity - Optional)		DATE

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