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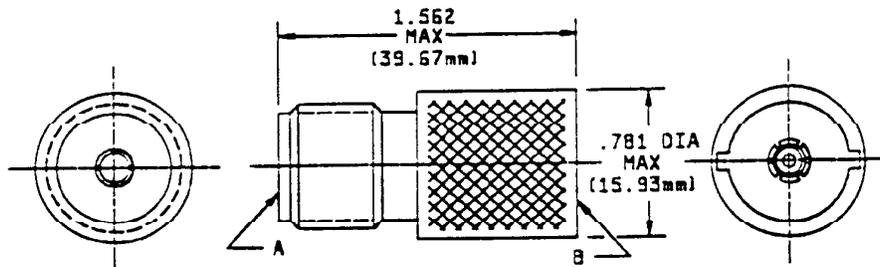
MIL-PRF-55339/19  
 6 May 1975  
 SUPERSEDING  
 MIL-A-27434-2  
 10 May 1960

PERFORMANCE SPECIFICATION

ADAPTER, CONNECTOR, COAXIAL, RADIO FREQUENCY,  
 (BETWEEN SERIES N TO SERIES C), 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.

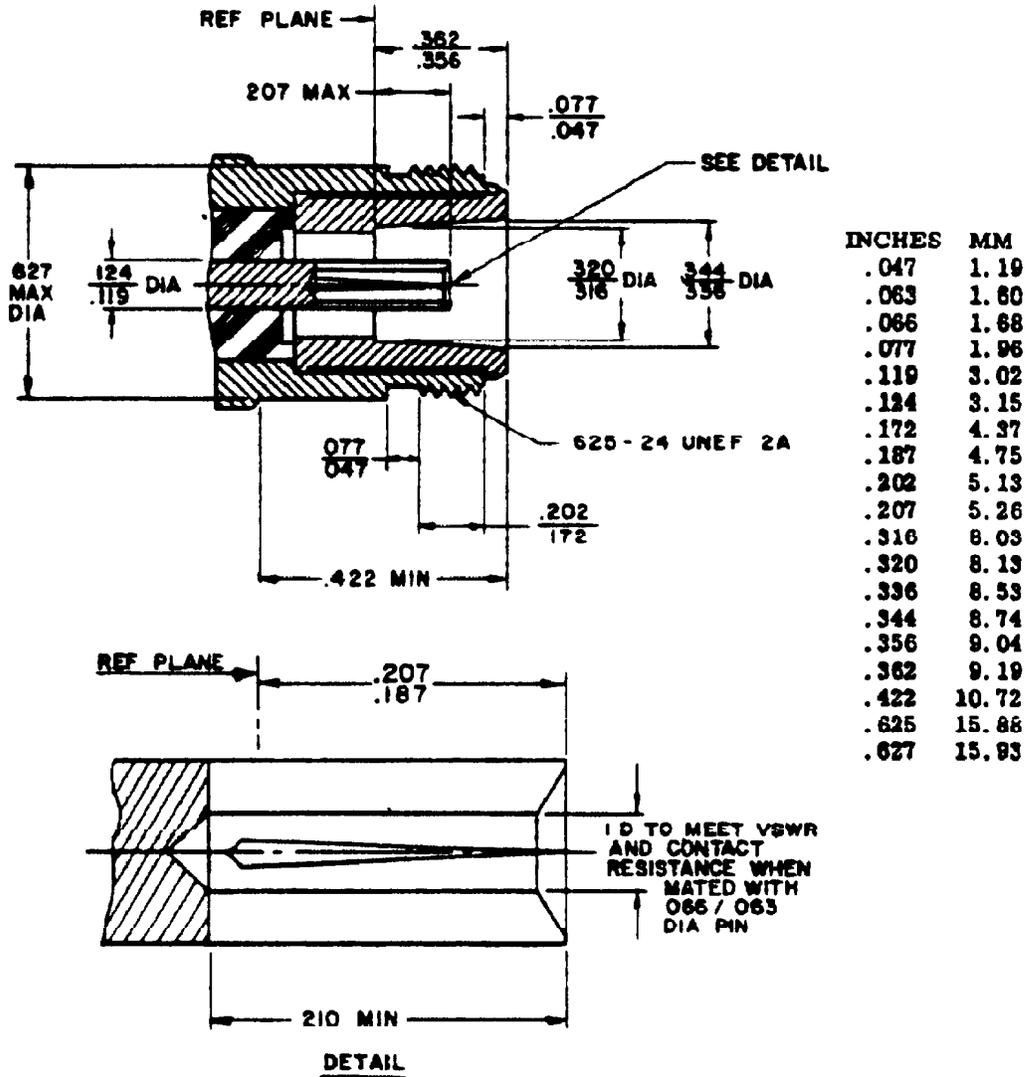


Reference	Series	Contact	Figure
A	N	Socket	2
B	C	Pin	3

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.

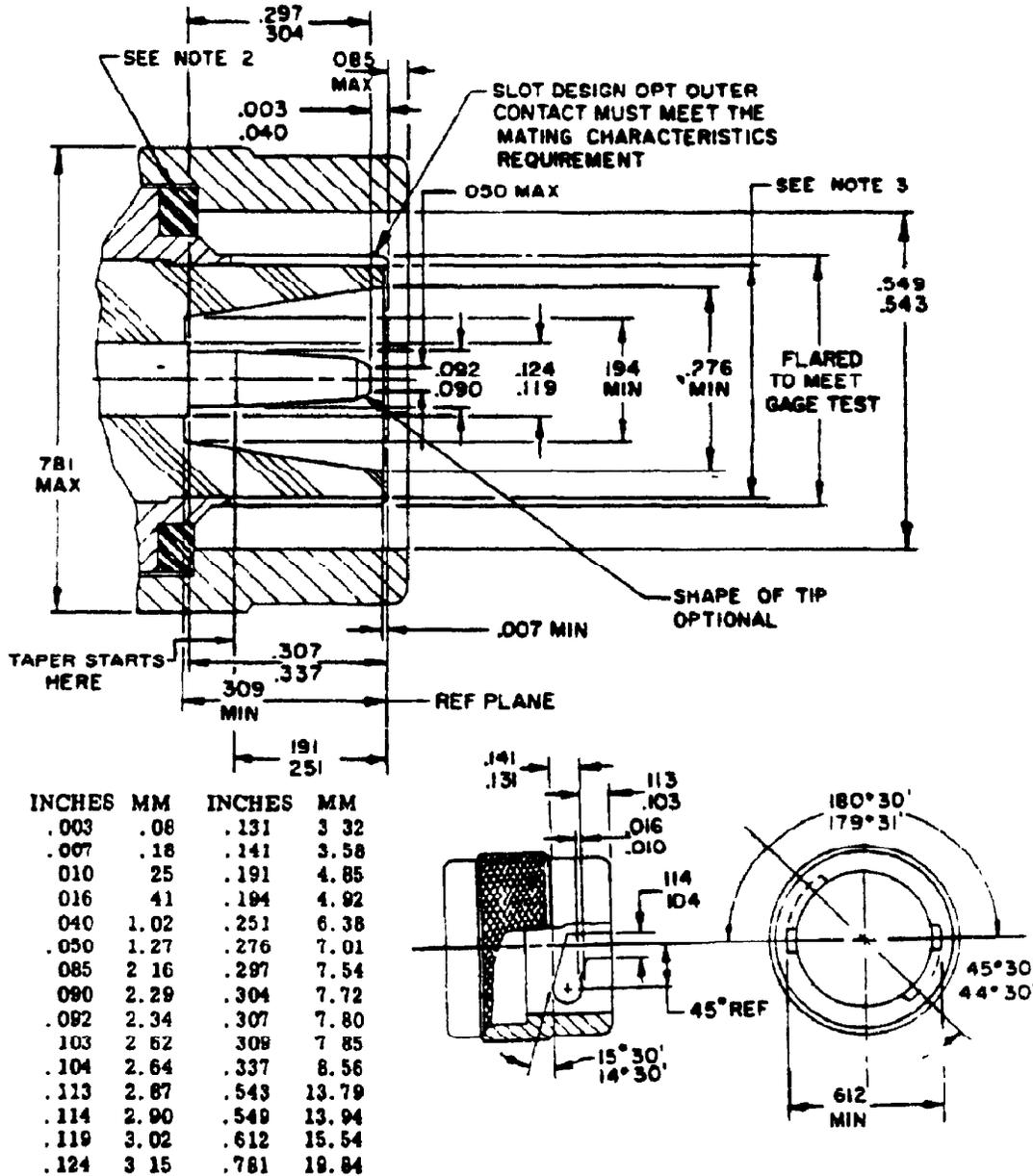
FIGURE 1. General configuration.



**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 N socket contact terminations.**



**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. In the mated condition the longitudinal force of the spring of the coupling mechanism shall exceed the pressure exerted by the sealing gasket by an amount necessary to insure butting of the outer contacts at the reference plane
4. The ID of outer contact when inserted into a .411 (10.44 mm) maximum ring gage shall be .377 (9.58 mm) minimum.
5. All undimensioned pictorial representations are for reference purposes only
6. Outer contact shall have a minimum of four slots.

**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, series N).**

Dimensions: See figures 1, 2, and 3.

	<u>Series N</u>	<u>Series C</u>
Center contact retention:		
Axial force (lb, min) - - - - -	6	6
Torque (in. oz, min) - - - - -	N/A	N/A
Force to engage and disengage:	<u>Series N</u>	<u>Series C</u>
Longitudinal force (lb, max) - - -	3.0	4.5
Torque (in. lb, max) - - - - -	6.0	4.0

Coupling proof torque: 15 in. lb, min, series N.

**Mating characteristics, series N:**

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), series N.

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), series N:

Steel test pin dia - .063 in, max.

Pin finish - 16 microinches.

Withdrawal force - 2 oz, min.

No. of withdrawals - 1.

Outer contact, series C:

Min test ring ID - .411 in, max.

Ring finish - 16 microinches.

Insertion force - 7 lb, max.

Insertion depth - .125 in., min.

No. of insertions - 1

Max test ring ID - .419 in., min.

Test ring finish - 16 microinches.

Insertion depth - .031 in., max.

No. of insertions - 1.

Permeability: <2.0

Seal. Hermetic - Not applicable.

Pressurized - Not applicable.

Weatherproof - Not applicable.

Insulation resistance: 5,000 megohms. min.

VSWR: 1.35, max at .5 to 11 GHz.

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

RF insertion loss: .2 dB, max, 9 GHz  
 (.067  $\sqrt{F}$  (GHz) dB max tested at 3 to 6 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	2.0
Outer	0.2	N/A

Vibration, high frequency: Interruptions - 1  $\mu$ 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: 100 lb, min, series C.

MARKING: As specified in MIL-A-55339.  
 Part No. M55339/19-00565.

TABLE I. Cross reference of part numbers.

Part number	Superseded part number or type designation <u>1/</u>
M55339/19-00565	UG-565A/U MS35324 REB49250

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 M55339/19-00565 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 - SE  
 Air Force - 11, 80  
 DSA - ES

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

Preparing activity:  
 Army - EL  
 Agent:  
 DSA - ES

(Project 5935-1918-17)

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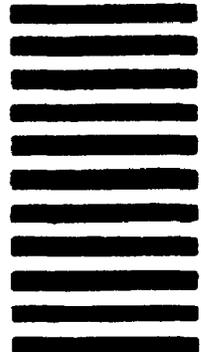


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