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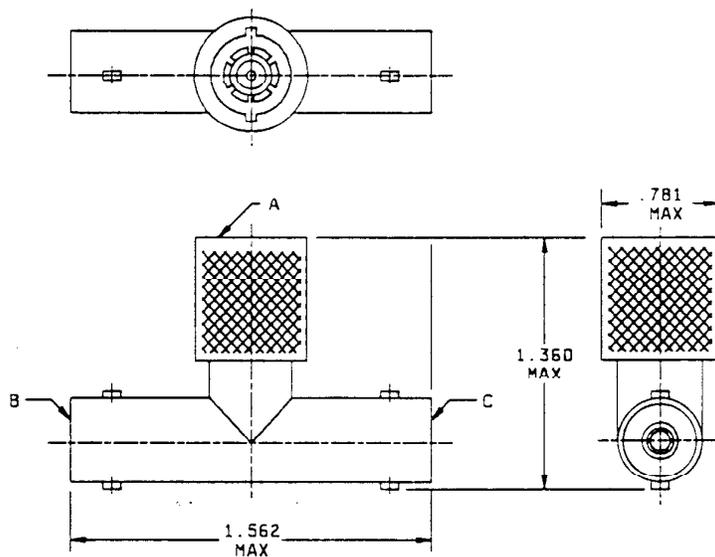
MIL-PRF-55339/11  
 6 May 1975  
 SUPERSEDING  
 MS35320D  
 25 February 1966

PERFORMANCE SPECIFICATION

ADAPTER, CONNECTOR, COAXIAL, RADIO FREQUENCY,  
 (WITHIN SERIES C), CLASS 2, "T" 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.

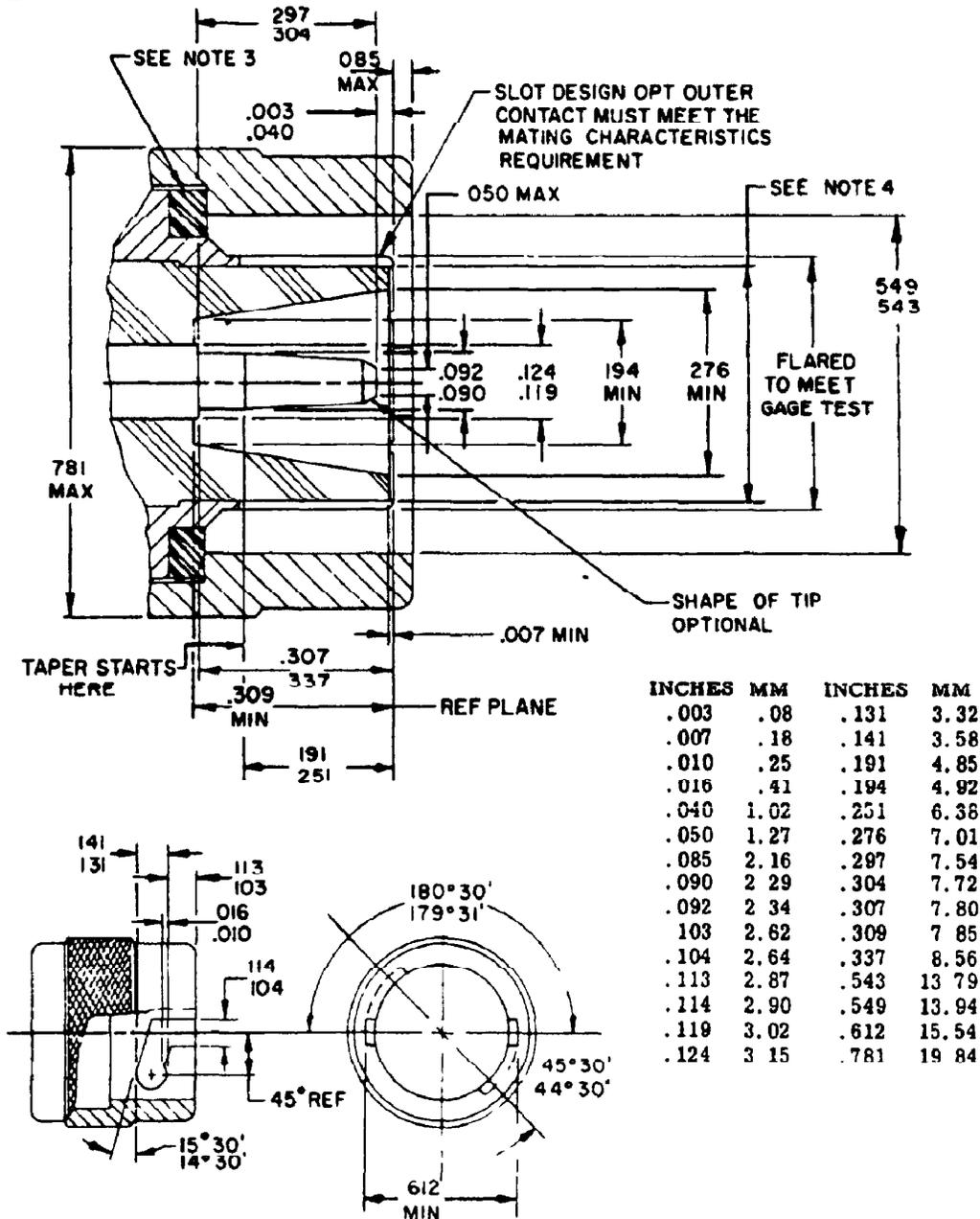


| Reference | Series | Contact | Figure | INCHES | MM    |
|-----------|--------|---------|--------|--------|-------|
| A         | C      | Pin     | 2      | .781   | 19.84 |
| B & C     | C      | Socket  | 3      | 1.360  | 34.54 |
|           |        |         |        | 1.562  | 39.67 |

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. All undimensioned pictorial representations are for reference purposes only.

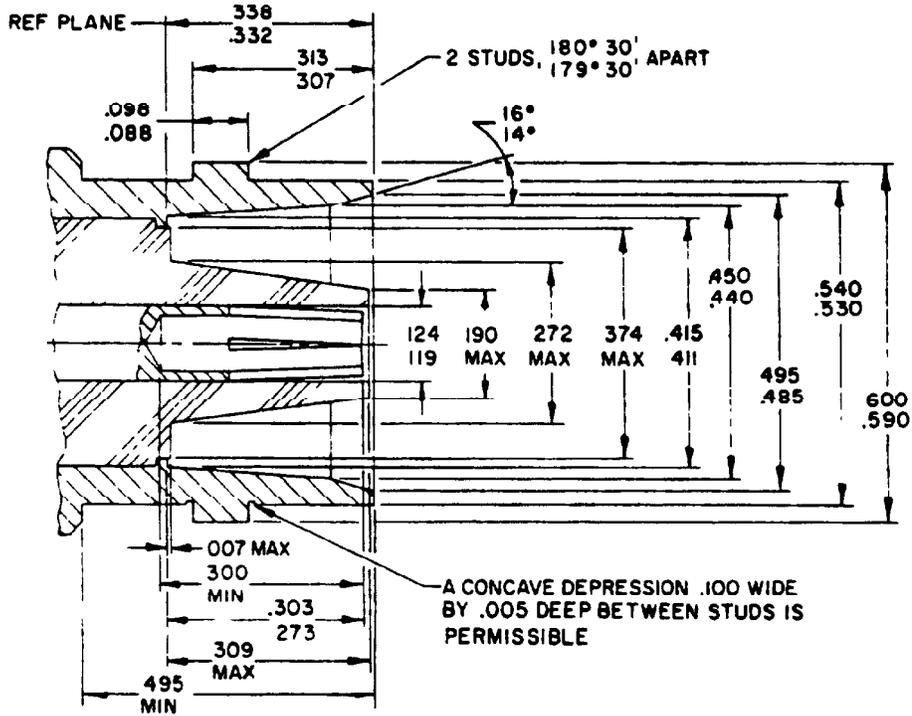
FIGURE 1. General configuration.



NOTES:

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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.

FIGURE 2. Mating dimensions for pin contact terminations



| INCHES | MM   | INCHES | MM   | INCHES | MM    |
|--------|------|--------|------|--------|-------|
| .005   | .13  | .273   | 6.93 | .411   | 10.44 |
| .007   | .18  | .300   | 7.62 | .415   | 10.54 |
| .088   | 2.24 | .303   | 7.70 | .440   | 11.18 |
| .098   | 2.49 | .307   | 7.80 | .450   | 11.43 |
| .100   | 2.54 | .309   | 7.85 | .485   | 12.32 |
| .119   | 3.02 | .313   | 7.95 | .495   | 12.57 |
| .124   | 3.15 | .332   | 8.43 | .530   | 13.46 |
| .190   | 4.83 | .338   | 8.59 | .540   | 13.72 |
| .272   | 6.91 | .374   | 9.50 | .590   | 14.99 |
|        |      |        |      | .600   | 15.24 |

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. All undimensioned pictorial representations are for reference purposes only.

FIGURE 3. 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 is not applicable).

Dimensions: See figures 1, 2, and 3.

Center contact retention: Axial force - 6 lb, min.  
Torque - 4 in. oz, min.

Force to engage and disengage: Longitudinal force - 4.5 lb, max.  
Torque - 4 in. lb, max.

Coupling proof torque: Not applicable.

Mating characteristics:

Center contact (socket):

Oversize test pin dia - .098 in., min.

Insertion depth - .125 in., min.

No. of insertions - 1.

Max test pin (insertion force test):

Steel test pin dia - .092 in., min.

Pin finish - 16 microinches.

Insertion force - 2 lb, max.

No. of insertions - 1.

Min test pin (withdrawal force):

Steel test pin dia - .090 in., max.

Pin finish - 16 microinches.

Withdrawal force - 2 oz, min.

No. of withdrawals - 1.

Outer contact:

Min test ring ID - .411 in., max.

Ring finish - 16 microinches.

Insertion force - 7 lb, max.

Insertion depth - .125 in., min.

No. of insertions - Not applicable.

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

Test ring finish - Not applicable.

Insertion depth - .031 in., max.

No. of insertions - Not applicable.

Permeability <2.0

Seal: Hermetic - Not applicable.

Pressurized - Not applicable.

Weatherproof - Not applicable.

Insulation resistance: 5,000 megohms, min.

VSWR: 2.0:1 max, .5 to 11 GHz, any two legs.

RF leakage (total): Not applicable.

RF insertion loss: Not applicable.

Durability: 500, min.

Rate: 12 c/m, min.

Dielectric withstanding: Test voltage - 3,000 Vrms, min (sea level).

Contact resistance (milliohms, max):

| Contact | Initial | After |
|---------|---------|-------|
| Center  | 2.5     | 3.0   |
| Outer   | 0.20    | N/A   |

Vibration, high frequency: Interruptions - 1 us, max.

Shock: Test condition I.

Thermal shock: Test condition C.

Moisture resistance: 200 megohms, min.

Corona level: Voltage - 750 V, min.

Altitude - 70,000 feet, min.

RF high potential withstanding voltage: RF voltage - 2,500 Vrms, min.  
Frequency - 5 MHz, min.

Salt spray (corrosion): Applicable.

Coupling mechanism retention force: 100 lb, min.

MARKING: As specified in MIL-A-55339.

Part No. M55339/11-00566.

TABLE I. Cross reference of part numbers.

| Part number     | Superseded part number<br>or type designation <u>1/</u> |
|-----------------|---|
| M55339/11-00566 | MS35320<br>UG-566A/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 M55339/11-00566 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 5935-1918-9)

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