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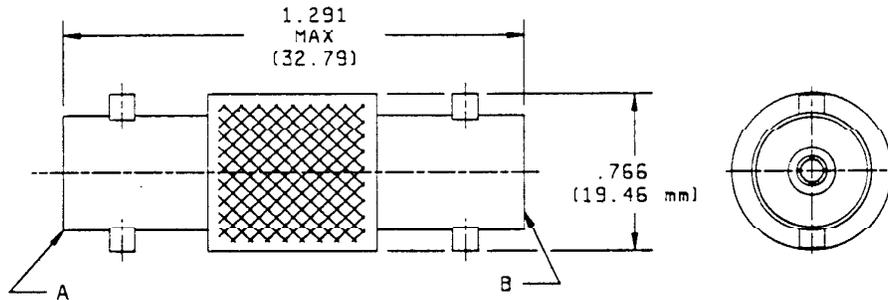
MIL-PRF-55339/8
 6 May 1975
 SUPERSEDING
 MS35288D
 25 February 1966

PERFORMANCE SPECIFICATION

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

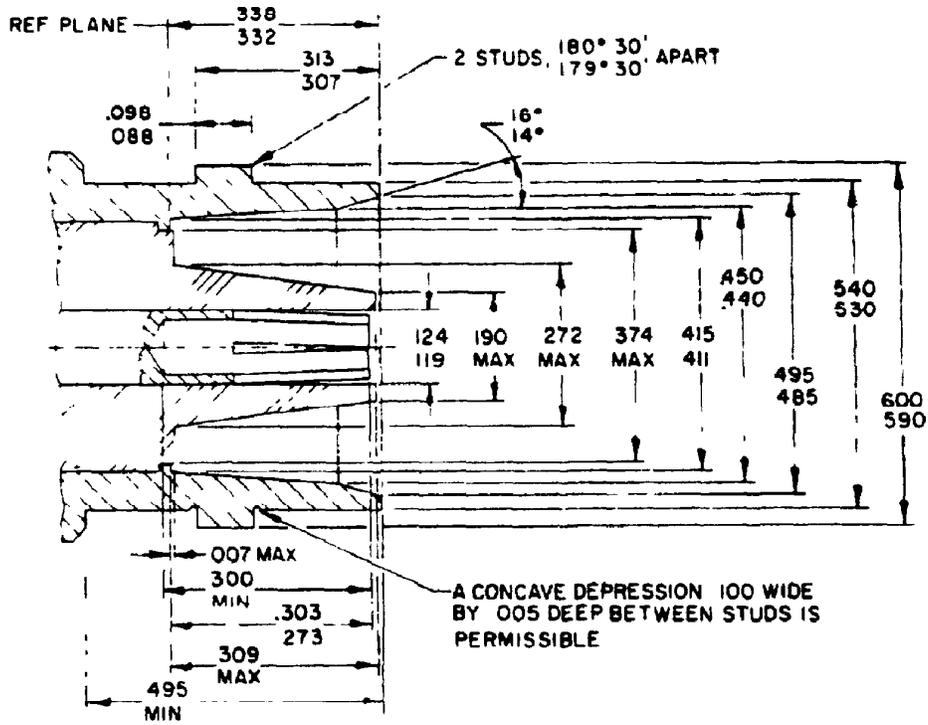


Reference	Series	Contact	Figure
A & B	C	Socket	2

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.
5. Shoulder design optional (knurl or flats).

FIGURE 1. General configuration.



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 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 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 - 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. Not applicable.

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: .20 dB, max, 6 GHz
(.082 \sqrt{F} (GHz) dB max tested at 3 and 6 GHz).

Durability. 500, min.
Rate: 12 c/m, min.

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Dielectric withstanding. Test voltage - 3,000 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 μ s, 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: Not applicable

MARKING. As specified in MIL-A-55339.

Part No M55339/08-00643

TABLE I Cross reference of part numbers.

Part number	Superseded part number or type designation <u>1/</u>
M55339/08-00643	M535288 UG-643/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 M55339/08-00643 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 - A1
Navy - AS, MC
Air Force - 19

Preparing activity:
Army - EL

Agent:
DSA - ES

(Project 5935-1918-6)