

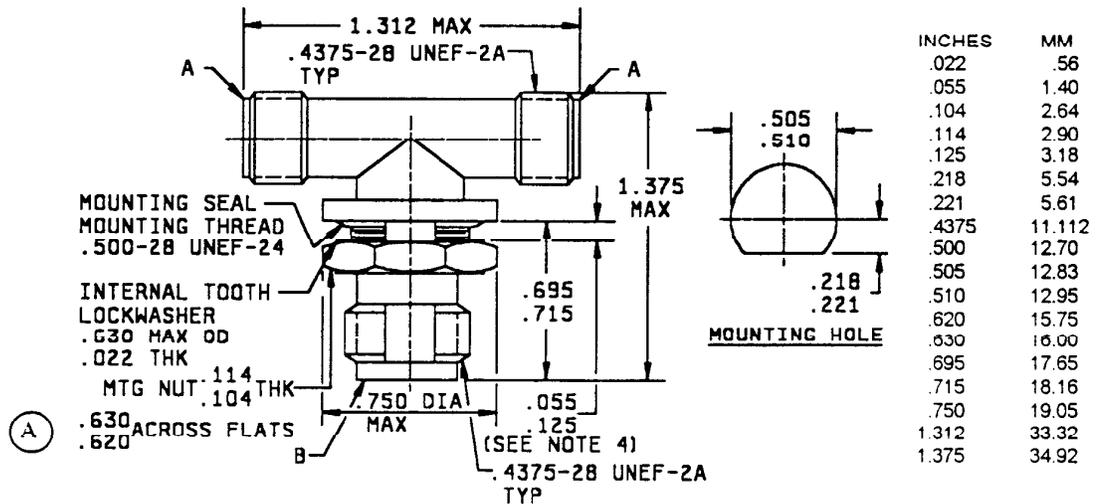
NOTE: The document identifier and heading has been changed on this page to reflect that this is a performance specification. There are no other changes to this document. The document identifier on subsequent pages has not been changed, but will be changed the next time this document is revised.

MIL-PRF-55339/50A
28 February 1979
SUPERSEDING
MIL-A-55339/50(AS)
15 September 1977

(A) PERFORMANCE SPECIFICATION
ADAPTER, CONNECTOR, COAXIAL, RADIO FREQUENCY,
(WITHIN SERIES TNC JACK TO TWO SERIES TNC JACKS), CLASS 2, "T" JAMNUT MOUNT

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

The complete requirements for procuring the connector adapter described herein shall consist of this document and the latest issue of Specification MIL-PRF-55339



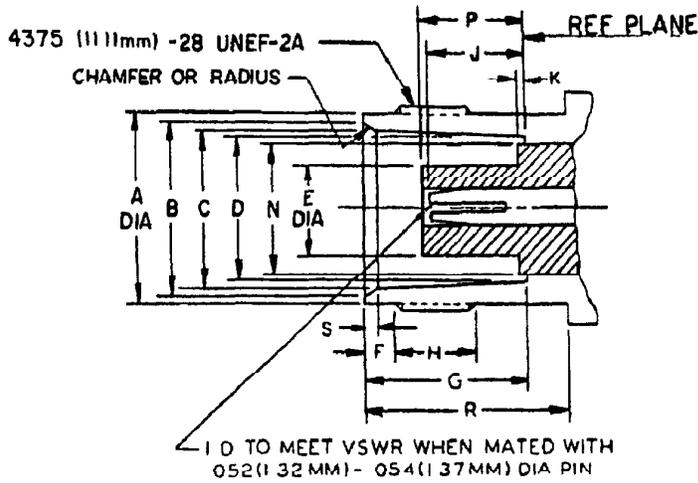
Reference	Series	Contact	Figure
A & B	TNC	Socket	2

NOTES:

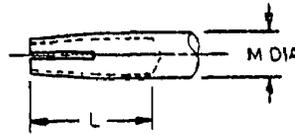
1. Dimensions are in inches
2. This dimension is the largest overall diameter of the connector.
3. Metric equivalents are given for general information only and are based upon 1 inch = 25.4 mm.
4. Panel thickness .055 (1.40 mm) minimum, .125 (3.18 mm) maximum.
5. Unless otherwise specified, tolerances are $\pm .005$ (.13 mm) on three place decimals and $\pm .010$ (.25 mm) on two place decimals.

FIGURE 1. General configuration.

(A) denotes changes



Ltr	Dimensions in inches with metric equivalents (mm) in parentheses (see note)	
	Minimum	Maximum
A	.378 (9.60)	.381 (9.68)
B	.345 (8.76)	.356 (9.04)
C	.327 (8.31)	.333 (8.46)
D	.319 (8.10)	.321 (8.15)
E		.186 (4.72)
F	.068 (1.73)	.088 (2.24)
G	.329 (8.36)	.333 (8.46)
H	.187 (4.75)	
J	.186 (4.72)	.206 (5.23)
K		.006 (.15)
L	.195 (4.95)	
M	.081 (2.06)	.087 (2.21)
N		.256 (6.50)
P	.188 (4.78)	.208 (5.28)
R	.415 (10.54)	
S	.015 (.38)	.030 (.76)



*N dimension applies to that portion (if applicable) of the dielectric which protrudes beyond the metal shoulder (or reference plane) by dimension K

NOTES:

1. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.
2. All undimensioned pictorial configurations are for reference purposes only.

FIGURE 2. Mating dimensions for socket 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 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 - 4 in oz, min

Force to engage and disengage Longitudinal force - Not applicable
Torque - 2 in lb, max

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 - Not applicable

Outer contact - Not applicable

Permeability <2 0

Seal

Hermetic - Not applicable

Pressurized - Not applicable.

Weatherproof - 30 PSI max (mounting seal)

Insulation resistance 5,000 megohms, min

VSWR. Not applicable

RF leakage (total) Not applicable

RF insertion loss Not applicable

Durability 500 cycles minimum at 12 cycles/min maximum The connector shall meet the mating characteristics and force to engage and disengage requirements

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 5	3 0
Outer	0 25	Not applicable

MIL-A-55339/50A

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): Test condition B.

MARKING: As specified in MIL-A-55339.
Part no. M55339/50-00001

Custodians:

Army - CR
Navy - EC
Air Force - 85

Review activities.

Army - AR, MI
Navy - SH, OS
Air Force - 11, 99
DLA - ES

User activities:

Army - AT
Navy - MC, AS, SH
Air Force - 19

Preparing activity
Army - CR

Agent:
DLA - ES

(Project 5935-3057-18)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL	OMB Approval No 22-R255
--	----------------------------

INSTRUCTIONS The purpose of this form is to solicit beneficial comments which will help achieve procurement of suitable products at reasonable cost and minimum delay, or will otherwise enhance use of the document. DoD contractors, government activities, or manufacturers/vendors who are prospective suppliers of the product are invited to submit comments to the government. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements. Attach any pertinent data which may be of use in improving this document. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity.

DOCUMENT IDENTIFIER AND TITLE
MIL-A-55339/50A

NAME OF ORGANIZATION AND ADDRESS HQ, USA CORADCOM ATIN DRDCO-CM-DM Fort Monmouth, NJ 07703	CONTRACT NUMBER MATERIAL PROCURED UNDER A <input type="checkbox"/> DIRECT GOVERNMENT CONTRACT <input type="checkbox"/> SUBCONTRACT
--	--

1 HAS ANY PART OF THE DOCUMENT CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?
A GIVE PARAGRAPH NUMBER AND WORDING

B RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

2 COMMENTS ON ANY DOCUMENT REQUIREMENT CONSIDERED TOO RIGID

3 IS THE DOCUMENT RESTRICTIVE?
 YES NO (If "Yes", in what way?)

4 REMARKS

SUBMITTED BY (Printed or typed name and address - Optional)	TELEPHONE NO DATE
---	--------------------------

FOLD

HQ, USA CORADCOM
ATTN DRDCO-CM-DM
Fort Monmouth, NJ 07703

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

POSTAGE AND FEES PAID
DEPARTMENT OF THE ARMY

DOD - 314



HQ, USA CORADCOM
ATTN DRDCO-CM-DM
Fort Monmouth, NJ 07703

FOLD