

INCH-POUND

MIL-DTL-27434/5A  
22 May 2008  
SUPERSEDING  
MIL-A-27434/5  
10 May 1960

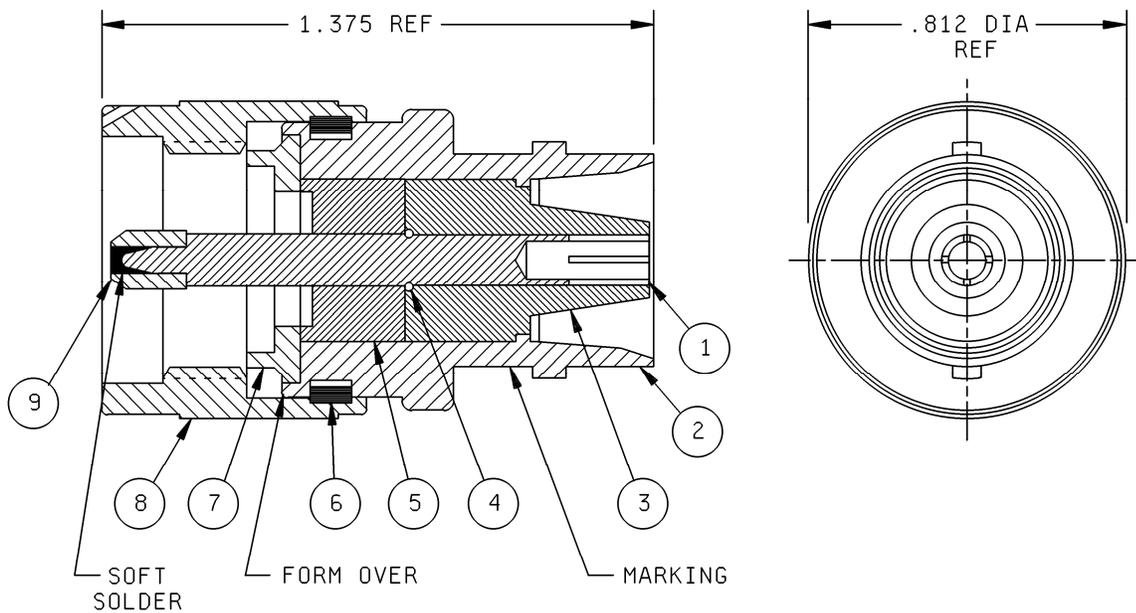
DETAIL SPECIFICATION SHEET

ADAPTER, CONNECTOR, COAXIAL, RADIOFREQUENCY,  
BETWEEN SERIES, SERIES C to SERIES UHF  
TYPE UG-637/U

Inactive for new design  
after 19 February 1982

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

The requirements for acquiring the product described herein  
shall consist of this specification sheet and MIL-DTL-27434.



| Inches | mm    |
|--------|-------|
| .812   | 20.62 |
| 1.375  | 34.92 |

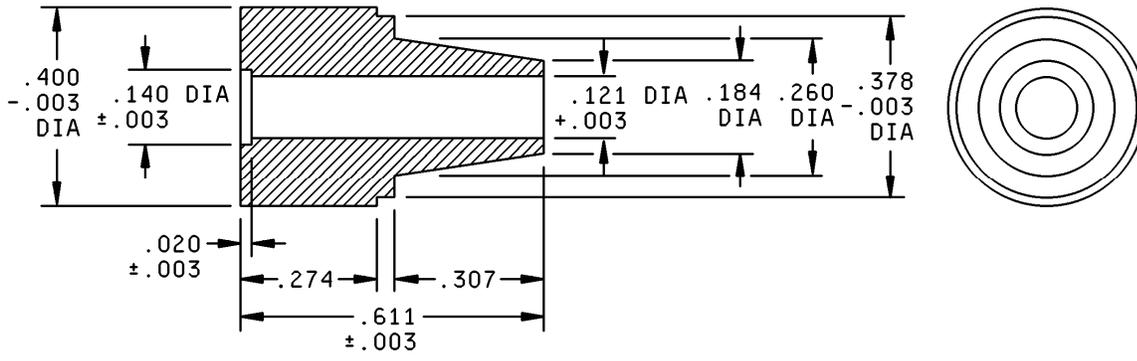
NOTES:

1. All dimensions are in inches.
2. Metric equivalents are given for information only.

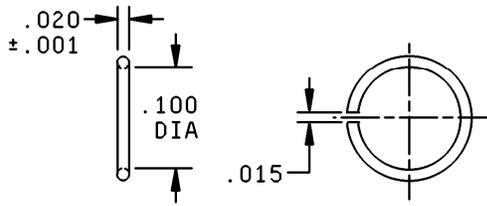
FIGURE 1. Type UG - 637/U connector adapter.



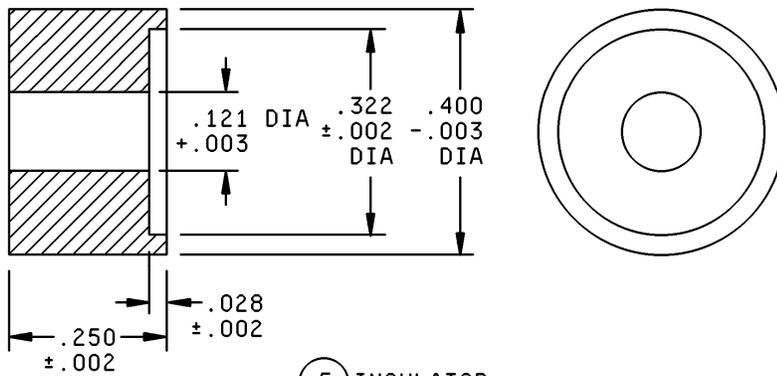
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③ INSULATOR



④ RING



⑤ INSULATOR

FIGURE 2. Type UG – 637/U connector adapter detail dimensions – Continued.

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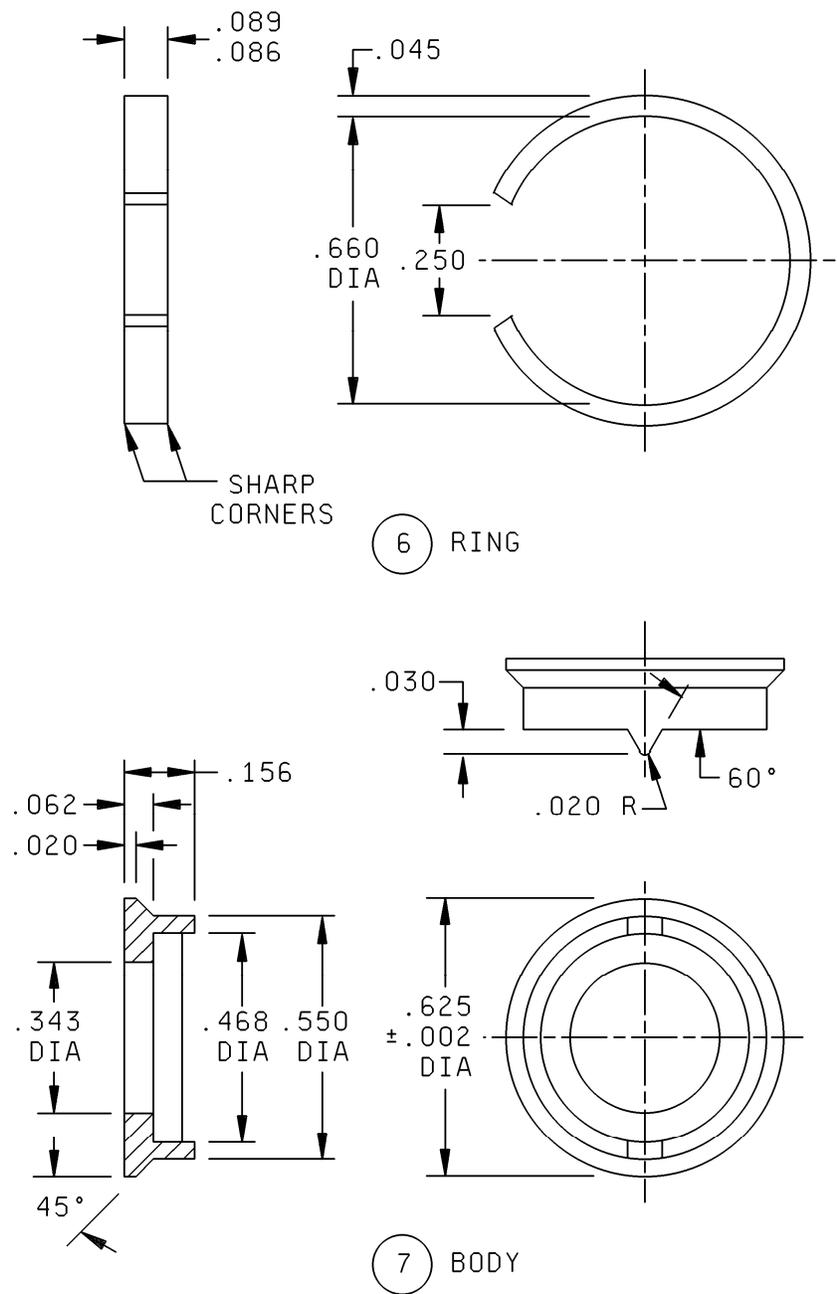
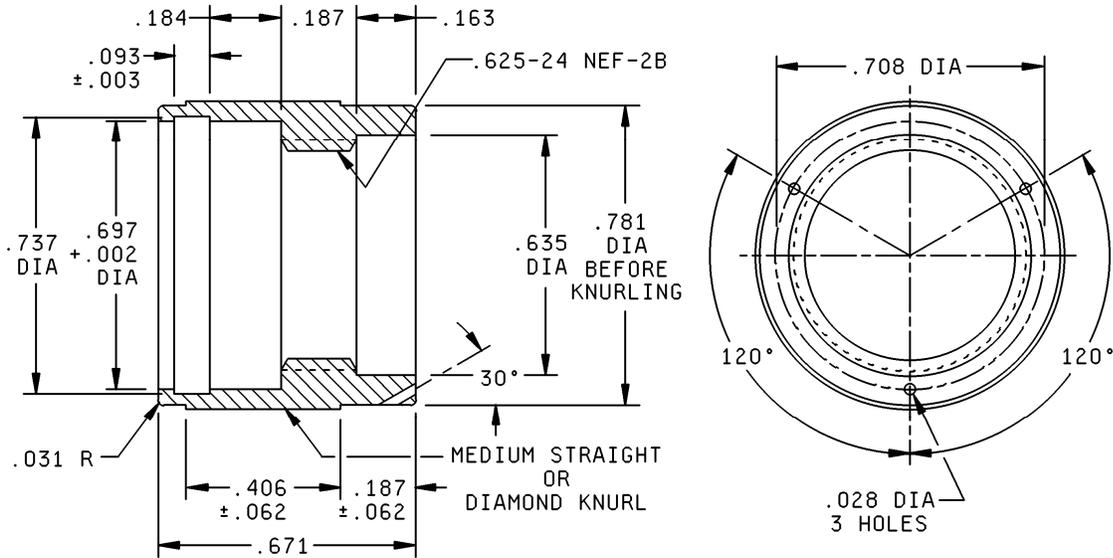
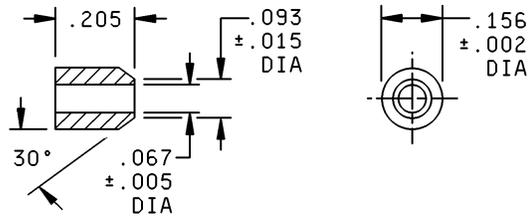


FIGURE 2. Type UG – 637/U connector adapter detail dimensions – Continued.

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⑧ COUPLING NUT



⑨ CENTER CONTACT

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.

FIGURE 2. Type UG – 637/U connector adapter detail dimensions – Continued.

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| Item | Description    | Material                | Quantity |
|------|----------------|-------------------------|----------|
| 1    | Center contact | Copper beryllium        | 1        |
| 2    | Body           | Brass                   | 1        |
| 3    | Insulator      | Polytetrafluoroethylene | 1        |
| 4    | Ring           | Copper wire             | 1        |
| 5    | Insulator      | Polytetrafluoroethylene | 1        |
| 6    | Ring           | Phosphor bronze         | 1        |
| 7    | Body           | Brass                   | 1        |
| 8    | Coupling nut   | Brass                   | 1        |
| 9    | Center contact | Brass                   | 1        |

| Inches | mm   | Inches | mm    |
|--------|------|--------|-------|
| .001   | 0.03 | .307   | 7.80  |
| .002   | 0.05 | .310   | 7.87  |
| .003   | 0.08 | .312   | 7.92  |
| .004   | 0.10 | .322   | 8.18  |
| .005   | 0.13 | .335   | 8.51  |
| .008   | 0.20 | .343   | 8.71  |
| .010   | 0.25 | .378   | 9.60  |
| .011   | 0.28 | .382   | 9.70  |
| .014   | 0.36 | .400   | 10.16 |
| .015   | 0.38 | .402   | 10.21 |
| .016   | 0.41 | .413   | 10.49 |
| .020   | 0.51 | .445   | 11.30 |
| .028   | 0.71 | .468   | 11.89 |
| .030   | 0.76 | .479   | 12.17 |
| .045   | 1.14 | .490   | 12.45 |
| .065   | 1.65 | .500   | 12.70 |
| .086   | 2.18 | .550   | 13.97 |
| .089   | 2.26 | .535   | 13.59 |
| .093   | 2.36 | .593   | 15.06 |
| .096   | 2.44 | .595   | 15.11 |
| .100   | 2.54 | .602   | 15.29 |
| .120   | 3.05 | .611   | 15.52 |
| .121   | 3.07 | .625   | 15.88 |
| .125   | 3.18 | .628   | 15.95 |
| .140   | 3.56 | .635   | 16.13 |
| .156   | 3.96 | .660   | 16.76 |
| .163   | 4.14 | .671   | 17.04 |
| .184   | 4.67 | .687   | 17.45 |
| .187   | 4.75 | .697   | 17.70 |
| .205   | 5.21 | .708   | 17.98 |
| .210   | 5.33 | .737   | 18.72 |
| .250   | 6.35 | .781   | 19.84 |
| .260   | 6.60 | .937   | 23.80 |
| .274   | 6.96 | 1.273  | 32.33 |

FIGURE 2. Type UG – 637/U connector adapter detail dimensions – Continued.

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ENGINEERING DATA:

Impedance: 50 ohms, nominal.

Frequency range: 0 to 300 MHz

Voltage rating: 500 V rms maximum at sea level.  
125 V rms maximum, at 70,000 feet.

Temperature rating: -65° C to +165° C.

REQUIREMENTS:

Dimensions and configuration: See figure 1 and figure 2.

Mating characteristics: Series C interface shall be in accordance with MIL-STD-348 and series UHF shall be in accordance with MIL-DTL-27434 and shall meet the interface dimensions after assembly.

Dielectric withstanding voltage: Method 301 of MIL-STD-202, 1,500 V rms minimum applied instantaneously at sea level.

Corrosion: Applicable.

Vibration: Applicable.

Shock: Applicable.

Part or Identifying Number (PIN): UG-637/U.

Supersession: This document supersedes Navy drawing MS35282 (Sig C).

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Referenced documents. In addition to MIL-DTL-27434, this document references the following:

MIL-STD-202  
MIL-STD-348

MIL-DTL-27434/5A

CONCLUDING MATERIAL

Custodians:

Army - CR  
Navy - EC  
Air Force - 85  
DLA - CC

Preparing activity:

DLA - CC

(Project 5935-2007-001)

Review activities:

Navy - SH  
Air Force - 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://assist.daps.dla.mil>.