

## MECHANICAL CHARACTERISTICS

|                                              |                         |
|----------------------------------------------|-------------------------|
| INTERFACE                                    | MIL-STD-348, FIG. 313-1 |
| IN ACCORDANCE WITH THE INTENT OF SLANT SHEET | MIL-PRF-39012/26 REF.   |
| RECOMMENDED MATING TORQUE                    | 20.0 IN-LBS. NOM.       |
| COUPLING PROOF TORQUE                        | 25 IN-LBS. MIN          |
| COUPLING NUT RETENTION                       | 60 LBS MIN.             |
| FORCE TO ENGAGE                              | 2.0 IN-LBS. MAX.        |
| FORCE TO DISENGAGE                           | 2.0 IN-LBS. MIN.        |
| DURABILITY                                   | 500 CYCLES MIN.         |
| AXIAL CONTACT RETENTION (FROM INTERFACE)     | 6.0 LBS. MIN.           |
| AXIAL CONTACT RETENTION (FROM CABLE)         | 6.0 LBS. MIN.           |
| CABLE RETENTION                              | 20 LBS. MIN.            |
| MASS                                         | 17.08 GRAMS NOM.        |
|                                              |                         |

## ELECTRICAL CHARACTERISTICS

|                                 |                               |
|---------------------------------|-------------------------------|
| IMPEDANCE                       | 50.0 Ohms NOM.                |
| MAXIMUM FREQUENCY               | 14.0 GHz                      |
| VSWR DC - 12.4 GHz              | 1.15:1 MAX.                   |
| 12.4 GHz - 14.0 GHz             | 1.20:1 MAX                    |
| INSERTION LOSS                  | 0.04 $\sqrt{f}$ (GHz) dB MAX. |
| DIELECTRIC WITHSTANDING VOLTAGE | 1500 Vrms MIN.                |
| INSULATION RESISTANCE           | 5000 MegaOhms MIN.            |
| RF LEAKAGE DC - 14 GHz          | -90 dB MIN.                   |
| CORONA                          | 375 Vrms MIN. @ 70,000 FEET   |
| RF HIGH POTENTIAL               | 1000 Vrms MIN.                |
| CONTACT RESISTANCE (INNER)      | 4.0 MilliOhms MAX.            |
| CONTACT RESISTANCE (OUTER)      | 2.0 MilliOhms MAX.            |
|                                 |                               |
|                                 |                               |

## ENVIRONMENTAL CHARACTERISTICS

|                       |                                                   |
|-----------------------|---------------------------------------------------|
| OPERATING TEMPERATURE | -62°C TO 165°C                                    |
| VIBRATION             | MIL-STD-202, METHOD 204, CONDITION D              |
| MECHANICAL SHOCK      | MIL-STD-202, METHOD 213, CONDITION I              |
| THERMAL SHOCK         | MIL-STD-202, METHOD 107, CONDITION B              |
| MOISTURE RESISTANCE   | MIL-STD-202, METHOD 106, CONDITION (NO VIBRATION) |
| CORROSION             | MIL-STD-202, METHOD 101, CONDITION B, 5%          |
|                       |                                                   |
|                       |                                                   |

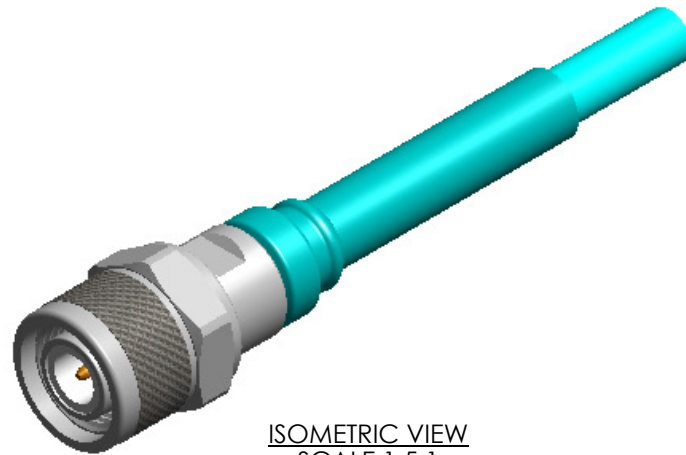
## MATERIALS AND FINISH

|                                          |                                                                                                           |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| CONTACT                                  | BERYLLIUM COPPER PER ASTM-B-196,<br>GOLD PLATE PER MIL-DTL- 45204, OVER<br>NICKEL PLATE PER AMS-QQ-N-290. |
| DIELECTRIC BEAD & DIELECTRIC STOP        | POLYPHENYLENE SULFIDE, (PPS) PER ASTM-D-6358                                                              |
| BODY, BUSHING, CLAMP NUT, & COUPLING NUT | STEEL, CORROSION RESISTANT,<br>PER ASTM-A-582, UNS NO. S30300,<br>PASSIVATE PER ASTM-A-967                |
| GASKET                                   | SILICONE RUBBER PER ZZ-R-765                                                                              |
| INSULATOR                                | TFE FLUOROCARBON, PER ASTM-D-1710                                                                         |
| SNAP RING                                | BERYLLIUM COPPER, PER ASTM-B-197                                                                          |
| CONTACT RING                             | BRASS, PER ASTM-B-16,<br>GOLD PLATE PER MIL-DTL-45204, OVER<br>NICKEL PLATE PER AMS-QQ-N-290              |
|                                          |                                                                                                           |
|                                          |                                                                                                           |

## APPLICATION

|              |                  |
|--------------|------------------|
| CABLE(\$)    | 200 SERIES       |
| INSTALLATION | PER CONFIGURATOR |
|              |                  |

**THIS DRAWING IS PROPRIETARY AND CONFIDENTIAL.**



ISOMETRIC VIEW  
SCALE 1.5:1

Technical drawing of a cable assembly, showing a cross-section view. The assembly consists of a central cable (MICRO-COAX 200 SERIES UTIFLEX® CABLE) encased in a SHRINK SLEEVE(S) (NOTE 1). The assembly is terminated with a connector (RP) and a hex nut (.562 HEX. REF. (Ø.630 REF. ACROSS PTS.)). Dimensions are provided in inches:

- Overall length: 2.38 REF. (NOTE 1)
- Length of the hex nut: 1.19 REF.
- Length of the connector: .595 REF.
- Length of the shrink sleeve: .030 REF.
- Inner diameter of the cable: Ø.436 REF.
- Outer diameter of the cable: Ø.28 REF. (NOTE 1)
- Length of the hex nut: .375 REF. ACROSS FLATS

NOTE:

1. MARKER LOCATION ON THIS DRAWING IS FOR REFERENCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE.

| REV. | DESCRIPTION | DATE      | BY  | APPVD |
|------|-------------|-----------|-----|-------|
| A    | ECO 65385   | 9/5/2006  | JMK | MJK   |
| B    | ECO 125389  | 7/19/2012 | MJM | RS    |

## SPECIFICATION DRAWING

|                                                                                                                                                 |          |     |                                                                                                                |  |                                                                                                                                    |          |      |        |           |             |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----|----------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|-----------|-------------|-----|
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|                                                                                                                                                 | DWN.     | SRS | 06/07/05                                                                                                       |  |                                                                                                                                    |          |      |        |           |             |     |
|                                                                                                                                                 | CHKD.    | CCF | 7/19/12                                                                                                        |  |                                                                                                                                    |          |      |        |           |             |     |
|                                                                                                                                                 | APPVD.   |     |                                                                                                                |  |                                                                                                                                    |          |      |        |           |             |     |
| TOLERANCES UNLESS OTHERWISE SPECIFIED                                                                                                           |          |     | TITLE                                                                                                          |  |                                                                                                                                    |          |      |        |           |             |     |
|                                                                                                                                                 |          |     | TNC PLUG, 200 SERIES CABLE                                                                                     |  |                                                                                                                                    |          |      |        |           |             |     |
| .XX                                                                                                                                             | ± .02    |     | ALL DIMENSIONS IN INCHES<br>UNLESS OTHERWISE SPECIFIED.<br>SCREW THDS. TO BE IN ACCORD<br>WITH ANSI B1.1-1989. |  |                                                                                                                                    | FSCM NO. | SIZE | SCALE  | SHEET NO. | DRAWING NO. | REV |
| .XXX                                                                                                                                            | ± .005   |     |                                                                                                                |  |                                                                                                                                    |          |      |        |           |             |     |
| .XXXX                                                                                                                                           | ± .0010  |     |                                                                                                                |  |                                                                                                                                    |          |      |        |           |             |     |
| ANGLES                                                                                                                                          | ± 2°     |     |                                                                                                                |  |                                                                                                                                    |          |      |        |           |             |     |
|                                                                                                                                                 |          |     | 64639                                                                                                          |  |                                                                                                                                    | B        | 3:1  | 1 OF 1 | SD904378  | B           |     |