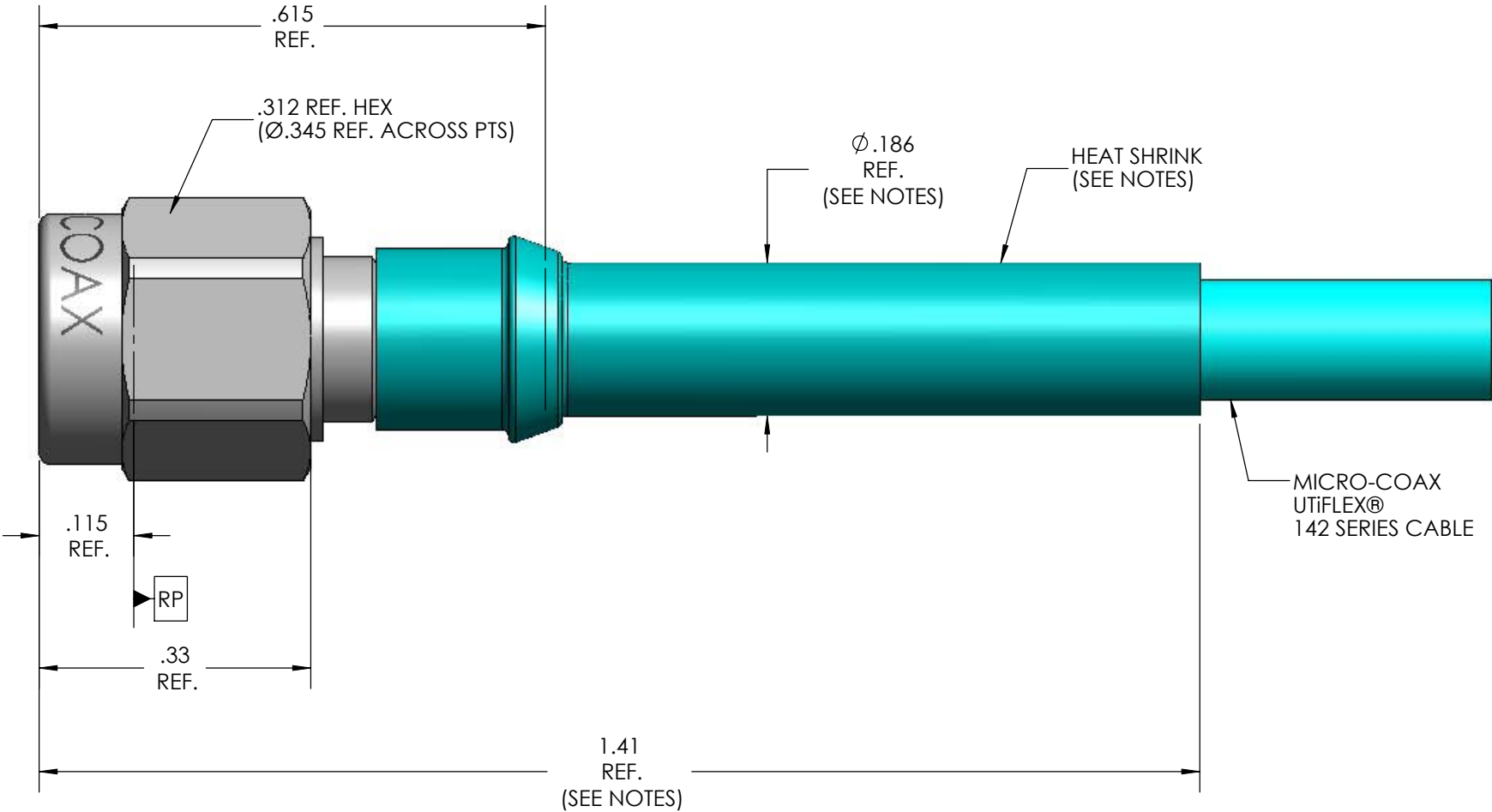


| MECHANICAL CHARACTERISTICS                   |   |
|--|---|
| INTERFACE                                    | MIL-STD-348, FIGURE 310-1   |
| IN ACCORDANCE WITH THE INTENT OF SLANT SHEET | MIL-PRF-39012/55 REF.   |
| RECOMMENDED MATING TORQUE                    | 9 IN-LBS. NOM.  |
| COUPLING PROOF TORQUE                        | 15 IN-LBS. MIN.   |
| COUPLING NUT RETENTION                       | 60 LBS. MIN.  |
| FORCE TO ENGAGE                              | 2 IN-LBS. MAX.  |
| FORCE TO DISENGAGE                           | 2 IN-LBS. MAX.  |
| DURABILITY                                   | 500 CYCLES MIN.   |
| AXIAL CONTACT RETENTION (FROM INTERFACE)     | 6 LBS. MIN.   |
| AXIAL CONTACT RETENTION (FROM CABLE)         | 6 LBS. MIN.   |
| CENTER CONTACT INSERTION (FROM CABLE)        | 3 LBS. MAX  |
| CENTER CONTACT WITHDRAW (FROM CABLE)         | 1 Oz. MIN.  |
| CABLE RETENTION                              | 10 LBS. MIN.  |
| MASS   | 2.64 GRAMS NOM.   |
|  |   |
|  |   |
| ELECTRICAL CHARACTERISTICS                   |   |
| IMPEDANCE                                    | 50 Ohms NOM.  |
| MAXIMUM FREQUENCY                            | 34 GHz  |
| VSWR DC - 26.5 GHz                           | 1.16:1 MAX.   |
| 26.5 GHz - 34 GHz                            | 1.21:1 MAX.   |
| INSERTION LOSS                               | 0.03 $\sqrt{f}$ (GHz) dB MAX.   |
| DIELECTRIC WITHSTANDING VOLTAGE              | 1000 Vrms MIN.  |
| INSULATION RESISTANCE                        | 5000 MegaOhms MIN.  |
| RF LEAKAGE DC                                | -90 dB MIN.   |
| CORONA                                       | 260 Vrms MIN. @ 70,000 FEET   |
| RF HIGH POTENTIAL                            | 650 Vrms MIN.   |
| CONTACT RESISTANCE (INNER)                   | 3.0 MilliOhms MAX.  |
| CONTACT RESISTANCE (OUTER)                   | 2.0 MilliOhms MAX.  |
|  |   |
| ENVIRONMENTAL CHARACTERISTICS                |   |
| OPERATING TEMPERATURE                        | -65°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  |
| CORROSION                                    | MIL-STD-202, METHOD 101, CONDITION B, 5%  |
| MOISTURE RESISTANCE                          | MIL-STD-202, METHOD 106, CONDITION (NO VIBRATION)   |
|  |   |
| MATERIALS AND FINISH                         |   |
| BODY   | STEEL, CORROSION RESISTANT, PER ASTM-A-582, UNS NO. S30300, GOLD PLATED PER MIL-DTL-45204, OVER NICKEL PLATE PER QQ-N-290                   |
| CONTACT                                      | BERYLLIUM COPPER, ASTM-B-196<br>GOLD PLATE PER ASTM B488, TYPE 3, CODE C, CLASS 1,25 OVER NICKEL PLATE IN ACCORDANCE WITH SAE-AMS-QQ-N-290. |
| SNAP RING                                    | BERYLLIUM COPPER, PER ASTM-B-197  |
| INSULATOR                                    | TFE FLUOROCARBON PER ASTM-D-1710  |
| DIELECTRIC STOP                              | POLYETHERMIDE THERMOPLASTIC, (ULTEM 1000), PER ASTM-D-5205  |
| GASKET                                       | FLUOROCARBON ELASTOMER (VITON) PER ASTM -D-1418. 55-65 DUROMETER.   |
| COUPLING NUT                                 | STEEL, CORROSION RESISTANT, PER ASTM-A-582, UNS NO. S30300, PASSIVATE PER ASTM-A-967  |
| APPLICATION                                  |   |
| CABLE(S)                                     | 142 SERIES CABLE  |
| INSTALLATION                                 | PER CONFIGURATOR  |
|  |   |

***THIS DRAWING IS PROPRIETARY AND CONFIDENTIAL.***



NOTE:

- HEAT SHRINK CONFIGURATION OPTIONAL.
- MARKER LOCATION ON THIS DRAWING IS FOR REFERENCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE.

| REV. | DESCRIPTION                  | DATE       | BY  | APPVD |
|------|------------------------------|------------|-----|-------|
| 1    | PRELIMINARY RELEASE          | 6/2/2003   | RDM | DBK   |
| 2    | UPDATE SPECIFICATIONS        | 6/4/2003   | RDM | DBK   |
| 3    | INSERTION LOSSS MIN. TO MAX  | 11/17/2003 | RDM | DBK   |
| 4    | REVISED DIMENSIONS AND NOTES | 10/11/2004 | SRS | LXT   |
| 5    | ECO 95800                    | 1/27/2010  | MJM | RS    |

|   |         |   |     |          |      |   |           |             |     |  |  |
|---|---------|---|-----|----------|------|---|-----------|-------------|-----|--|--|
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|   |         | DWN.  | RDM | 6/2/03   |      |   |           |             |     |  |  |
|   |         | CHKD.   | RS  | 1/27/10  |      |   |           |             |     |  |  |
|   |         | APPVD.  |     |          |      |   |           |             |     |  |  |
| TOLERANCES UNLESS OTHERWISE SPECIFIED   |         | TITLE   |     |          |      |   |           |             |     |  |  |
|   |         | SMA PLUG, 142 SERIES  |     |          |      |   |           |             |     |  |  |
| .XX   | ± .02   | ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED. SCREW THDS. TO BE IN ACCORD WITH ANSI B1.1-1989. |     | FSCM NO. | SIZE | SCALE   | SHEET NO. | DRAWING NO. | REV |  |  |
| .XXX  | ± .005  |   |     | 64639    | B    | 5:1   | 1 OF 1    | SD903134    | 5   |  |  |
| .XXXX   | ± .0010 |   |     |          |      |   |           |             |     |  |  |
| ANGLES  | ± 2°    |   |     |          |      |   |           |             |     |  |  |