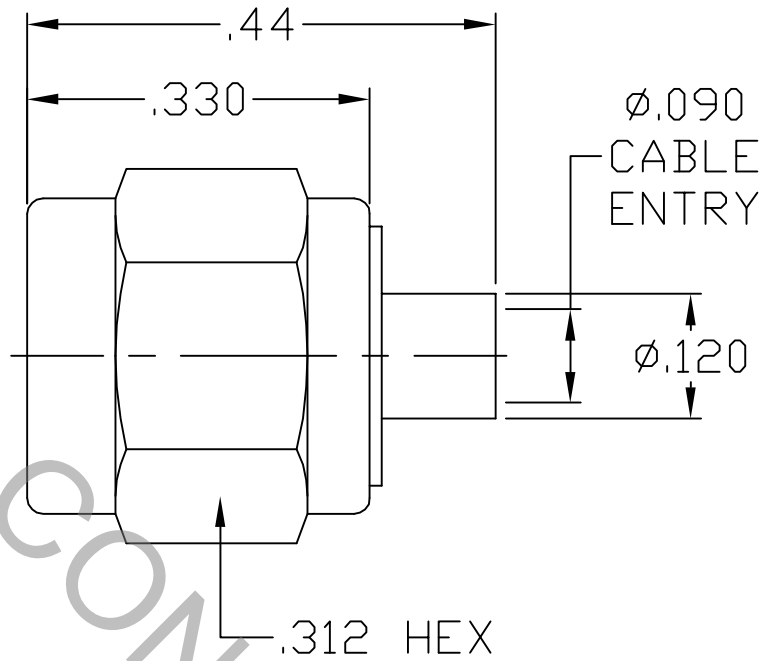


# SPECIFICATION CONTROL DRAWING



1. MATING INTERFACE DIMENSIONS Per MIL-STD-348 Fig. 310.4 (SMA PLUG).

## 2. ELECTRICAL

|   |                                |
|---|--------------------------------|
| FREQUENCY RANGE GHz                         | DC TO 26.5 GHz                 |
| VSWR (MAX) *                                | 1.06 + .006 x FGHz             |
| INSERTION LOSS (dB MAX) *                   | .035 dB x $\sqrt{\text{FGHz}}$ |
| NOMINAL IMPEDANCE (OHMS)                    | 50                             |
| VOLTAGE RATING (MAX. VRMS)                  | 250                            |
| RF LEAKAGE (MIN. dB DOWN)                   | -100 dB - FGHz                 |
| TEMPERATURE RATING (DEGREES CENTIGRADE)     | -65°c TO + 165°c               |
| DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS) | 750                            |
| INSULATION RESISTANCE (MIN. MEGOHMS)        | 5,000                          |
| CONTACT RESISTANCE                          |                                |
| • CENTER CONTACT (MAX. MILLIOHMS)           | 6.0                            |
| • OUTER CONTACT (MAX. MILLIOHMS)            | 2.0                            |

\* TERMINATED IN A 50 OHM LOAD

**RoHS**  
COMPLIANT

| REV. | DCN NO. | DATE    | APP. | DIMENSIONS ARE IN INCHES<br>TOLERANCES |              |             | <br>HAVERHILL, MA 01835  |
|------|---------|---------|------|--|--------------|-------------|--|
|      |         |         |      | DECIMALS                               | FRACTIONAL   | ANGULAR     |  |
| -    | 1097    | 7/94    | GL   | .X ± .030                              | ± 1/64       | X ° ± 1° 0' |  |
| AA   | 05-1492 | 4/5/05  | TS   | .XX ± .010                             |              | X ° X ± 15' |  |
| AB   | 07-2175 | 12/6/07 | DC   | .XXX ± .005                            |              |             |  |
|      |         |         |      | DRAWN GL                               | DATE         | 7/94        | TITLE SMA PLUG,<br>CAPTURED CONTACT,<br>DIRECT SOLDER TO<br>Ø.085 SEMI-RIGID CABLE |
|      |         |         |      | APPROVED DGG                           | DATE         | 7/94        |  |
|      |         |         |      | CODE IDENT.                            | SHEET 1 OF 2 |             | DWG. NO. 9800-8521-6246  |
|      |         |         |      | 2J899                                  |              |             |  |

# SPECIFICATION CONTROL DRAWING

## 3. MECHANICAL

CAPTIVATION-CENTER CONTACT  
MAX AXIAL FORCE \_\_\_\_\_ 3.0 LBS.  
MAX RADIAL TORQUE \_\_\_\_\_ N/A  
CENTER CONTACT AXIAL FORCES  
● INSERTION (MAX OUNCES) \_\_\_\_\_ N/A  
● WITHDRAWAL (MIN. OUNCES) \_\_\_\_\_ N/A  
CONNECTOR ENGAGEMENT/DISENGAGEMENT (MAX LBS.) \_\_\_\_\_ 2.0  
CONNECTOR DURABILITY (MIN. CYCLES) \_\_\_\_\_ 500  
RECOMMENDED MATING TORQUE \_\_\_\_\_ 7 - 10 IN. LBS.

## 4. ENVIRONMENTAL

TEMPERATURE CYCLING \_\_\_\_\_ MIL-STD-202, METHOD 102, COND. C ( -65° c TO +165° c )  
SHOCK \_\_\_\_\_ MIL-STD-202, METHOD 213, COND. I (100 G's)  
VIBRATION \_\_\_\_\_ MIL-STD-202, METHOD 204, COND. D (20 G's)  
MOISTURE RESISTANCE \_\_\_\_\_ MIL-STD-202, METHOD 106, LESS STEP 7b  
CORROSION \_\_\_\_\_ MIL-STD-202, METHOD 101, COND. B (48 HOURS)  
BAROMETRIC PRESSURE (ALTITUDE) \_\_\_\_\_ MIL-STD-202, METHOD 105, COND. C ( 70,000 FT. ) ( 190 VRMS )

## 5. MATERIAL

BODY & COUPLING NUT \_\_\_\_\_ STAINLESS STEEL PER ASTM-A-582, TYPE 303, COND. A  
CONTACT \_\_\_\_\_ BERYLLIUM COPPER PER ASTM-B-196-90, COPPER ALLOY  
No. UNS-C17300, TEMPER TD04.  
INSULATOR \_\_\_\_\_ TEFLON PER ASTM-D-1711-02, TYPE 2, GRADE 1, CLASS A.  
GASKET \_\_\_\_\_ SILICONE RUBBER PER ZZ-R-765.

## 6. FINISH

COUPLING NUT \_\_\_\_\_ PASSIVATE PER AMS QQ-P-35, TYPE 2.  
BODY \_\_\_\_\_ GOLD PER ASTM-B-488, TYPE I, CODE C, CLASS 1.25  
(.000050 MIN. THK.) OVER NICKEL per QQ-N-290  
(.000150 MIN. THK.) OVER COPPER per MIL-C-14550  
(.000010 MIN. THK.)  
CONTACT \_\_\_\_\_ GOLD PER ASTM-B-488, TYPE I, CODE C, CLASS 2.5  
(.000100 MIN. THK.) OVER NICKEL per QQ-N-290  
(.000050 MIN. THK.) OVER COPPER per MIL-C-14550  
(.000010 MIN. THK.)  
INSULATOR \_\_\_\_\_ N/A