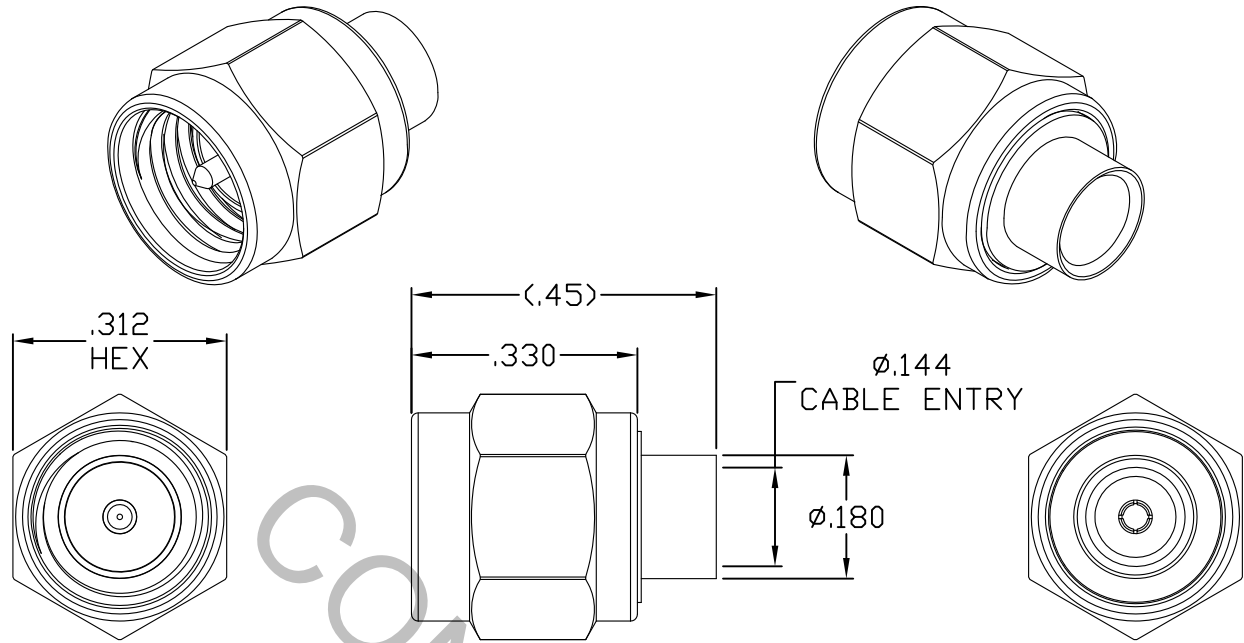


# SPECIFICATION CONTROL DRAWING



1. MATING INTERFACE DIMENSIONS PER MIL-STD-348 Fig. 310-1 (SMA, PLUG)


## 2. ELECTRICAL

|   |       |  |
|---|-------|--|
| FREQUENCY RANGE GHz                         | _____ | DC TO 18.0 GHz.                                    |
| VSWR (MAX) *                                | _____ | $1.06 + .006 \times \text{FGHz.}$                  |
| INSERTION LOSS (dB MAX) *                   | _____ | $.035 \text{ dB} \times \sqrt{\text{FGHz.}}$       |
| NOMINAL IMPEDANCE (OHMS)                    | _____ | 50   |
| VOLTAGE RATING (MAX. VRMS)                  | _____ | 250  |
| RF LEAKAGE (MIN. dB DOWN)                   | _____ | 100 dB - FGHz.                                     |
| TEMPERATURE RATING (DEGREES CENTIGRADE)     | _____ | $-65^{\circ} \text{ c TO } +165^{\circ} \text{ c}$ |
| 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

This Document contains proprietary and confidential information.

| REV. | DCN NO. | DATE    | APP. | DIMENSIONS ARE IN INCHES<br>TOLERANCES             |                      |  | <br>HAVERHILL, MA. 01835  |
|------|---------|---------|------|--|----------------------|--|--|
| AA   | 17-1054 | 1/12/17 | DC   | DECIMALS<br>.X ± .030<br>.XX ± .010<br>.XXX ± .005 | FRACTIONAL<br>± 1/64 | ANGULAR<br>$X^{\circ} \pm 1' 0''$<br>$X^{\circ} X' \pm 15''$ |  |
|      |         |         |      | DRAWN  | RMS                  | DATE 1/12/17   | TITLE SMA PLUG, STRAIGHT,<br>DIRECT SOLDER ATTACHMENT,<br>FOR $\phi .141$ S/R CABLE<br>CAPTURED CENTER CONTACT |
|      |         |         |      | APPROVED   | DC                   | DATE 1/12/17   |  |
|      |         |         |      | CODE IDENT.  | SHEET 1 OF 2         |  |  |
|      |         |         |      | 2J899  |                      |  | DWG. NO. 9800-4121-6484  |

# SPECIFICATION CONTROL DRAWING

## 3. MECHANICAL

### CAPTIVATION-CENTER CONTACT

- MIN. AXIAL FORCE \_\_\_\_\_ 4.0 LBS.
- MIN. RADIAL TORQUE \_\_\_\_\_ 4.0 IN.OZ.

### CENTER CONTACT AXIAL FORCES

- INSERTION (MAX. OUNCES) \_\_\_\_\_ N/A
- WITHDRAWAL (MIN. OUNCES) \_\_\_\_\_ N/A

CONNECTOR ENGAGEMENT/DISENGAGEMENT (MAX. IN. LBS.) \_\_\_\_\_ 2.0

CONNECTOR DURABILITY (MIN. CYCLES) \_\_\_\_\_ 1,000

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 AND COUPLING NUT \_\_\_\_\_ STAINLESS STEEL PER ASTM-A-582, TYPE 303, COND. A

CONTACT AND RETAINING RING \_\_\_\_\_ BERYLLIUM COPPER PER ASTM-B-196/B, 196M-03, COPPER ALLOY No. UNS-C17300, TEMPER TD04.

INSULATOR \_\_\_\_\_ TEFLON PER ASTM-D-1710-02, TYPE 1, GRADE 1, CLASS B.

GASKET \_\_\_\_\_ FLUROSILICONE PER MIL-R-25988, TYPE 1, CLASS 1, GRADE 60/3.

## 6. FINISH

BODY \_\_\_\_\_ GOLD PER ASTM-B-488, TYPE I, CODE C, CLASS 1.27 (.000050 MIN. THK.) OVER NICKEL PER SAE-AMS-QQ-N-290 CLASS 1 (.000150 MIN. THK.) OVER NICKEL (WOODS OR WATTS) (.000010 MIN. THK.)

COUPLING NUT \_\_\_\_\_ PASSIVATE PER AMS-2700, TYPE 2, CLASS 4.

CONTACT \_\_\_\_\_ GOLD PER ASTM-B-488, TYPE I, CODE C, CLASS 0.75 (.000030 - .000055 THK.) OVER NICKEL PER SAE-AMS-QQ-N-290 CLASS 1 (.000050 - .000075 THK.) OVER COPPER PER AMS-2418 (.000010 MIN. THK.)

INSULATOR, RETAINING RING AND GASKET \_\_\_\_\_ N/A