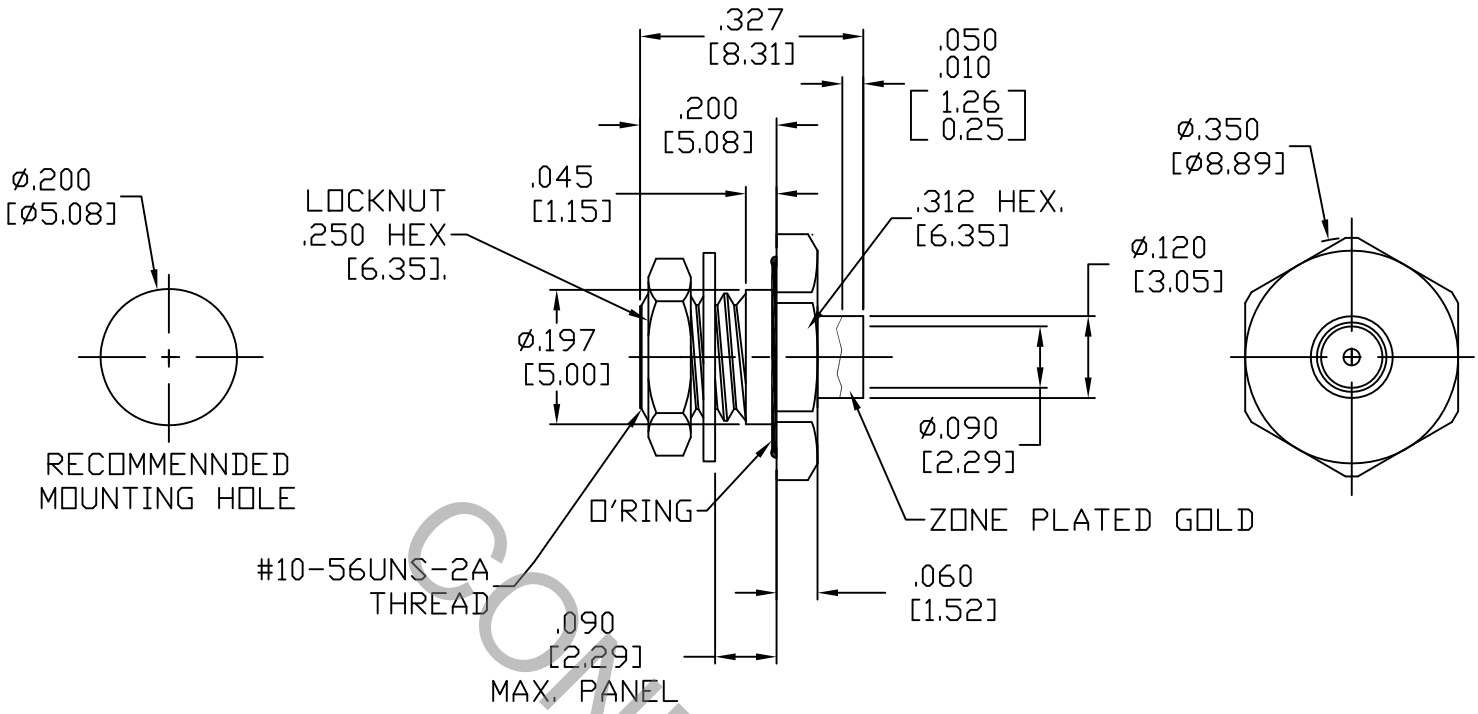
# SPECIFICATION CONTROL DRAWING

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1. MATING INTERFACE DIMENSIONS PER MIL-STD-348A FIG. 326.4 (SMP, PLUG, SMOOTH BORE)

2. ELECTRICAL

| | |
|---|---|
| FREQUENCY RANGE GHz | DC TO 40 GHz. |
| VSWR (MAX.) ❋ | 1.05 + .006 x FGHz. |
| INSERTION LOSS (dB MAX.) | .04 dB x $\sqrt{\text{FGHz.}}$ |
| NOMINAL IMPEDANCE (OHMS) | 50 |
| VOLTAGE RATING (MAX. VRMS) | 250 |
| RF LEAKAGE (MIN. dB DOWN) | N/A |
| TEMPERATURE RATING (DEGREES CENTIGRADE) | −65 ° c TO +165 ° c |
| DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS) | 750 |
| INSULATION RESISTANCE (MIN. MEGOHMS) | 10,000 |
| 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. |
|---|---|---|---|
| AA | 14-1853 | 7/18/14 | TS |

DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS: .X ±.030, .XX ±.010, .XXX ±.005
FRACTIONAL: ±1/64
ANGULAR: X ° ±1 °0', X ° X' ±15'
SURFACE ROUGHNESS 63 √ MIL-STD 10.

dynawave INCORPORATED
HAVERHILL, MA. 01835

DRAWN TS DATE 7/18/14

APPROVED DC DATE 7/18/14

TITLE
SMP, PLUG, SMOOTH BORE
BULKHEAD MOUNT
DIRECT SOLDER TO ø.085 S.R.

CODE IDENT. 2J899

SHEET 1 OF 2

DWG. NO. 2119-8520-6800

# SPECIFICATION CONTROL DRAWING

## 3. MECHANICAL

CAPTIVATION–CENTER CONTACT

- MIN. AXIAL FORCE — 4.0 LBS
- MIN. RADIAL TORQUE — N/A

CONNECTOR ENGAGEMENT FORCES

- INSERTION (MAX. LBS.) — 2.0 (SMOOTH BORE)
- WITHDRAWAL (MIN. LBS.) — 0.5 (SMOOTH BORE)

CONNECTOR DURABILITY (MIN. MATING) — 1,000 (SMOOTH BORE)

RECOMMENDED INSTALLATION TORQUE — 5–8 IN./LB.

## 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 (HIGH FREQUENCY) | MIL–STD–202, METHOD 204, COND. D (20 G's) |
| VIBRATION (RANDOM) | MIL–STD–202, METHOD 214, TEST COND. F. |
| THERMAL SHOCK | MIL–STD–202, METHOD 107, TEST COND. B, HIGH TEMP. +165° c. |
| MOISTURE RESISTANCE | MIL–STD–202, METHOD 106, LESS STEP 7b, 1000 MEGOHMS (5 MINUTES). |
| 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 MIN.) |

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## 5. MATERIAL

| | |
|---|---|
| CONNECTOR BODY & LOCKNUT | STAINLESS STEEL PER ASTM–A–582 TYPE 303, COND. A. |
| LOCKWASHER | STAINLESS STEEL PER ASTM–A–582, TYPE 410 |
| CENTER CONTACT | 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. |
| EMI O'RING | PER MIL–DTL–83528E, TYPE D, SILVER PLATED ALUMINUM IN FLUOROSILICONE |

## 6. FINISH

| | |
|---|---|
| CONNECTOR BODY (ZONE PLATED AREA ONLY) | GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 0.70 (.000030 MIN. THK.) OVER NICKEL PER SAE–AMS–QQ–N–290 CLASS 1 (.000150 MIN. THK.) OVER COPPER PER AMS–2418 (.000010 MIN. THK.) |
| CONNECTOR, LOCKNUT AND LOCKWASHER | PASSIVATE PER AMS–2700, TYPE 6, CLASS 4. |
| CENTER CONTACT | 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 (.000050 MIN. THK.) OVER COPPER PER AMS–2418 (.000010 MIN. THK.) |
| INSULATOR & EMI O'RING | N/A |