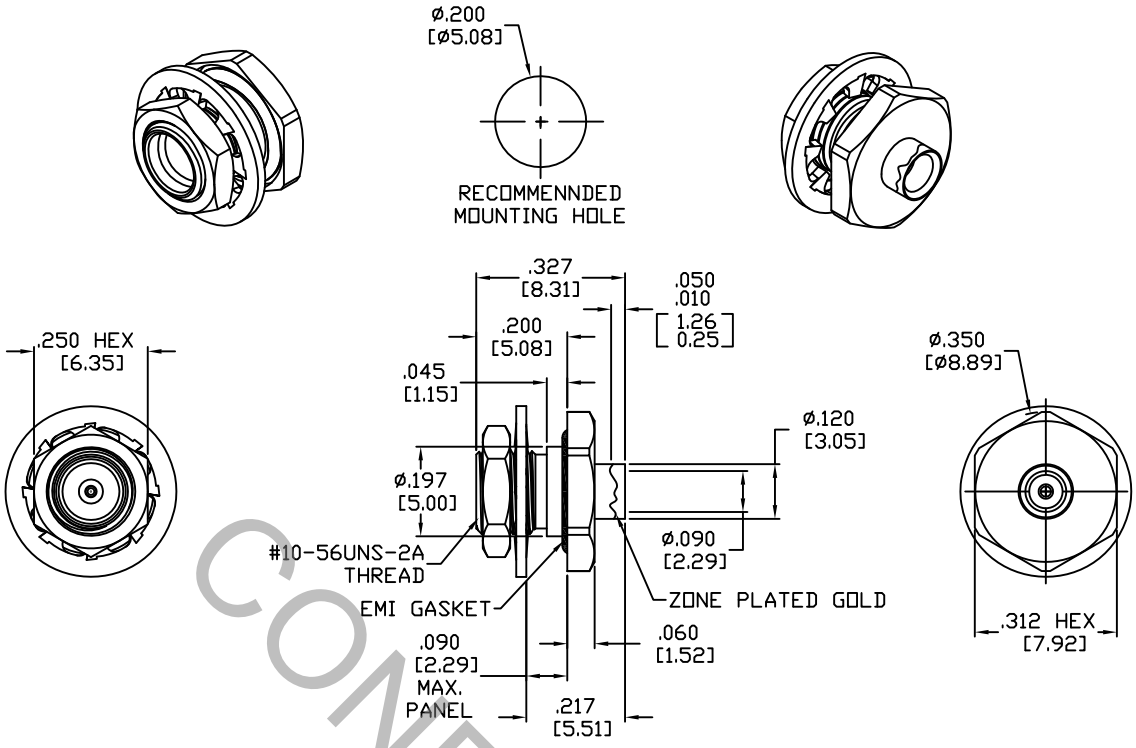
SPECIFICATION CONTROL DRAWING



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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	14−1743	6/8/14	TS
AB	14−1769	6/24/14	TS
AC	14−2098	9/3/14	DC

DIMENSIONS ARE IN INCHES
TOLERANCES

DECIMALS	FRACTIONAL	ANGULAR
.X ±.030 .XX ±.010 .XXX ±.005	±1/64	X °±1 °0' X ° X' ± 15'

SURFACE ROUGHNESS 63 √ MIL-STD 10.

dynawave INCORPORATED
HAVERHILL, MA. 01835

DRAWN TS DATE 6/18/14

APPROVED DC DATE 6/18/14

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

CODE IDENT. 2J899

SHEET 1 OF 2

DWG. NO. 2119−8520−3800

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–479, TYPE 316L.
LOCKWASHER	STAINLESS STEEL PER ASTM–A–582, TYPE 400 SERIES.
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