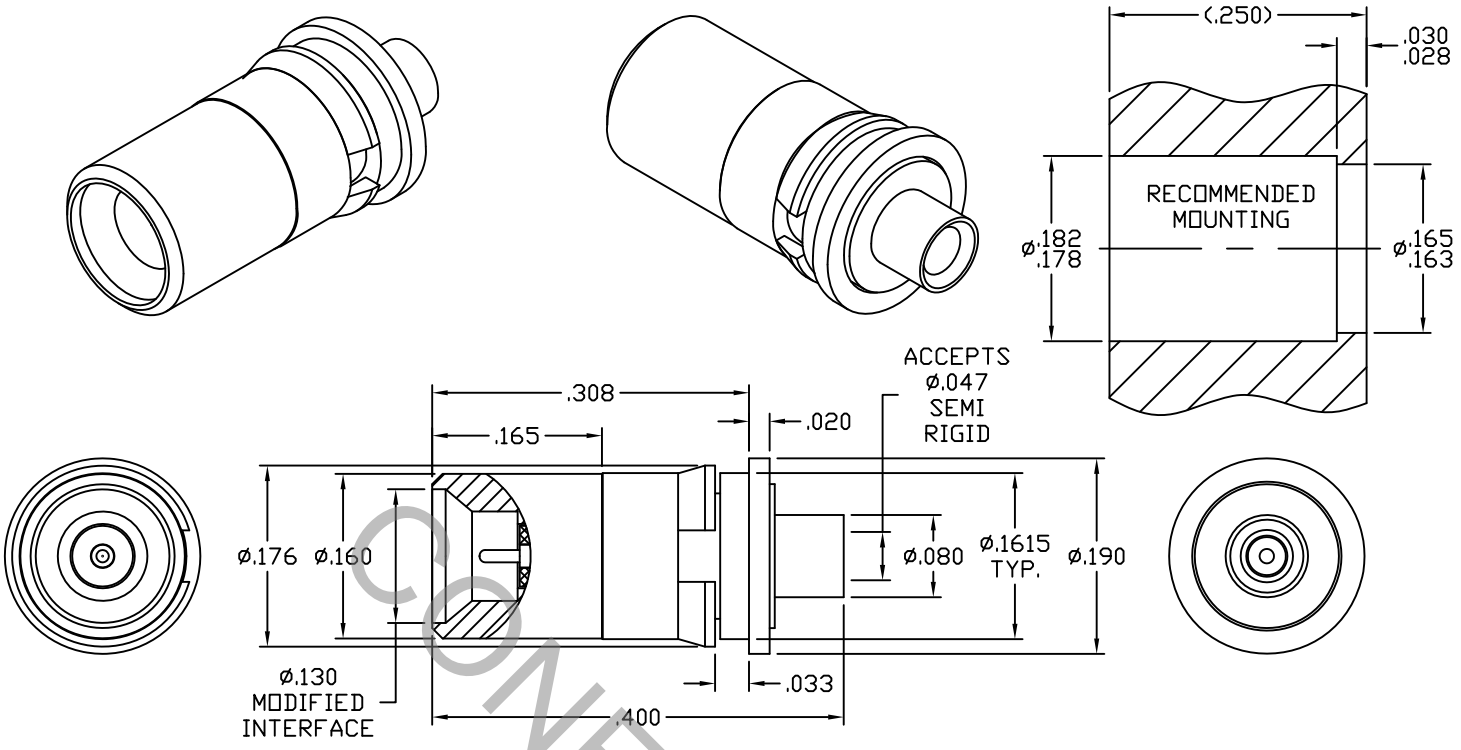
SPECIFICATION CONTROL DRAWING



CONFIDENTIAL

1. MATING — INTERFACE DIMENSIONS Per MIL-STD-348 Fig. 328.3 (SMPM MALE SMOOTH BORE). MODIFIED INTERFACE AS SHOWN.

2. ELECTRICAL

FREQUENCY RANGE GHz	DC TO 26.5 GHz
VSWR (MAX.) ❋	1.08 + .010 x FGHz
INSERTION LOSS (dB MAX.) ❋	.05 dB x $\sqrt{FGHz}$
NOMINAL IMPEDANCE (OHMS)	50
VOLTAGE RATING (MAX. VRMS)	167
RF LEAKAGE (MIN. dB DOWN)	−80 dB − FGHz
TEMPERATURE RATING (DEGREES CENTIGRADE)	−65°c TO + 165°c
DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS)	500
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.
AA	14-1722	6/12/14	DC
AB	14-1736	6/17/14	DC

DIMENSIONS ARE IN INCHES
TOLERANCES

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

dynawave INCORPORATED
HAVERHILL, MA 01835

DRAWN DC DATE 6/12/14

APPROVED DC DATE 6/12/14

TITLE SMPM MALE, MODIFIED SMOOTH BORE, BULKHEAD, DIRECT SOLDER, ø.047 SEMI-RIGID CABLE

CODE IDENT. 2J899

SHEET 1 OF 2

DWG. NO. 3119-4720-6201

SPECIFICATION CONTROL DRAWING

3. MECHANICAL

CAPTIVATION–CENTER CONTACT
- MIN. AXIAL FORCE — N/A
- MIN. RADIAL TORQUE — N/A

CONNECTOR AXIAL FORCES
- INSERTION (MAX. POUNDS) — 3.0
- WITHDRAWAL (MIN. POUNDS) — 0.25

CONNECTOR DURABILITY (MIN. CYCLES) — 500

4. ENVIRONMENTAL

TEMPERATURE CYCLING	MIL–STD–202, METHOD 107, 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.) (125 VRMS)

CONFIDENTIAL

5. MATERIAL

BODIES	STAINLESS STEEL PER ASTM–A–582, TYPE 303, COND. A
CONTACT & 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.
REAR INSULATOR	TORLON 4023.

6. FINISH

SMPM BODY	PASSIVATE PER AMS–2700, TYPE 2, CLASS 4.
CABLE ENTRY 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.)
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.)
RETAINING RING	NICKEL PER SAE–AMS–QQ–N–290, CLASS 1, (.000200 MIN. THK.) OVER COPPER PER AMS–2418 (.000010 MIN. THK.)
INSULATORS	N/A