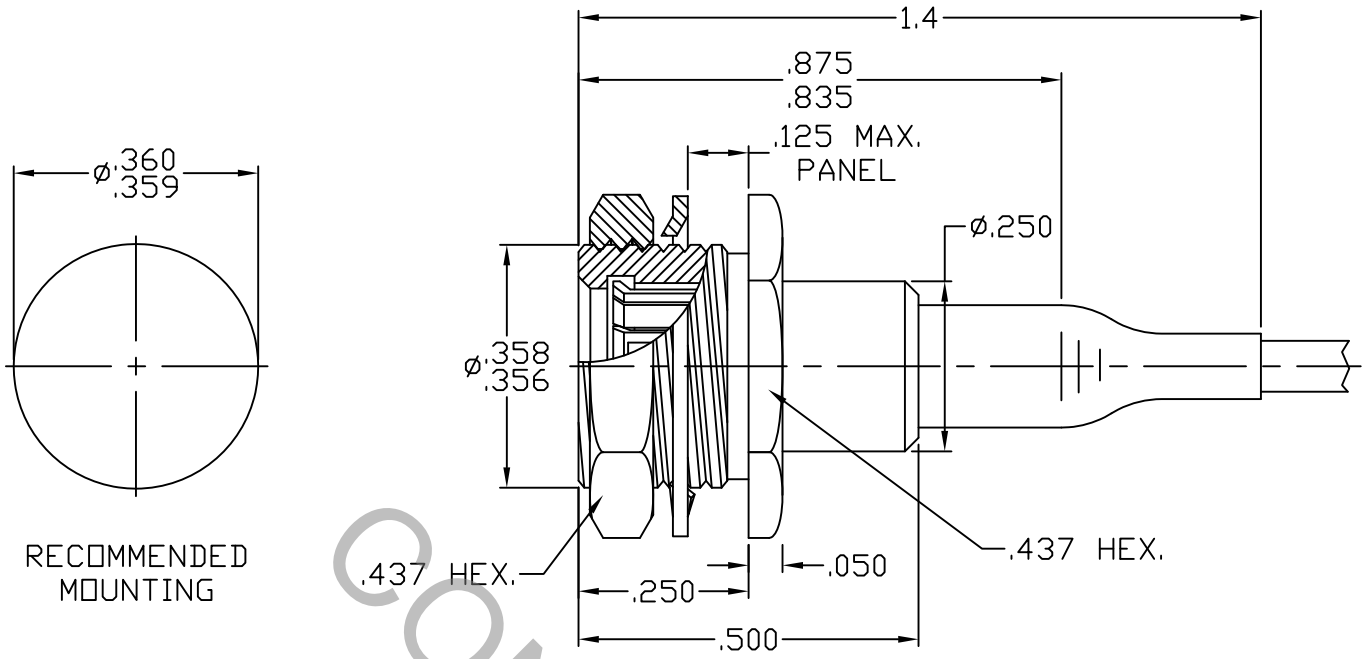
SPECIFICATION CONTROL DRAWING



CONFIDENTIAL

1. MATING — INTERFACE DIMENSIONS PER MIL-STD-348A, Fig. 321.2 (BMA, JACK)

2. ELECTRICAL

FREQUENCY RANGE GHz	DC TO 3.0 GHz.
VSWR (MAX.) ❋	1.15 + .02 x FGHz.
INSERTION LOSS (dB MAX.)	
• BMA INTERFACE GAP (.000 to .015)	.030 dB x $\sqrt{FGHz}$
• BMA INTERFACE GAP (.016 to .030)	.060 dB x $\sqrt{FGHz}$
NOMINAL IMPEDANCE (OHMS)	50
VOLTAGE RATING (MAX. VRMS)	250
RF LEAKAGE (MIN. dB DOWN)	
• BMA INTERFACE BOTTOMED (.000 GAP)	−100 dB − FGHz
• BMA INTERFACE GAP (.001 to .015)	−90 dB − FGHz
• BMA INTERFACE GAP (.016 to .030)	−75 dB − FGHz
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)	3.0
• OUTER CONTACT (MAX. MILLIOHMS)	2.0

❋ TERMINATED IN A 50 OHM LOAD

RoHS COMPLIANT

REV.	DCN NO.	DATE	APP.
AA	10−1959	10/8/10	TS
AB	10−2004	10/22/10	TS

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	TS	DATE	10/8/10
APPROVED	DC	DATE	10/8/10

TITLE: BMA JACK, BULKHEAD, CRIMP ATTACHMENT TO RG 174/U, 179, 187,188, 316

CODE IDENT.	SHEET 1 OF 2	DWG. NO.
2J899		6710−1630−6231

SPECIFICATION CONTROL DRAWING

3. MECHANICAL

CAPTIVATION–CENTER CONTACT
- MIN. AXIAL FORCE — 4.5 LBS.
- MIN. RADIAL TORQUE — N/A

BMA ENGAGEMENT FORCES
- INSERTION (MAX. OUNCES) — 32.0
- WITHDRAWAL (MIN. OUNCES) — 1.0

BMA DURABILITY (MIN. MATING) — 1000

RECOMMENDED MATING FORCES
- MOUNTING TORQUE — 20–24 IN. LBS.
- PLUG CONNECTOR – INSERTION FORCE — 3.0 LBS. MAXIMUM

4. ENVIRONMENTAL

TEMPERATURE CYCLING	MIL–STD–202, METHOD 102, COND. C (–65 ° c TO + 200 °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)

CONFIDENTIAL

5. MATERIAL

CONNECTOR BODY AND HEX NUT	STAINLESS STEEL PER ASTM A 581, TYPE 303, COND. A.
CENTER CONTACT AND SPRING FINGERS	BERYLLIUM COPPER PER ASTM B196/B 196M–03, COPPER ALLOY No. UNS C 17300, TEMPER TD04.
CRIMP SLEEVE	BRASS PER ASTM B16, TEMPER H02, ALLOY C36000.
INSULATOR	TEFLON PER ASTM D 1710–02, TYPE 1, GRADE 1, CLASS B
LOCKWASHER	CARBON STEEL, TYPE 1050

6. FINISH

BODY, HEX NUT AND LOCKWASHER	PASSIVATE PER AMS 2700, TYPE 2, CLASS 4.
CENTER CONTACT AND SPRING FINGERS	GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 2.5 (.000100 MIN. THICKNESS) OVER NICKEL PER SAE AMS, QQ–N–290 CLASS 1, (.000050 MIN. THICKNESS) OVER COPPER PER AMS 2418, (.000010 MIN. THICKNESS).
CRIMP SLEEVE	NICKEL PER SAE AMS, QQ–N–290 CLASS 1, OVER WATTS OR WOODS NICKEL OVER COPPER PER AMS 2418, (.000010 MIN. THK.) (.000010 MIN. THICKNESS).
INSULATOR	N/A