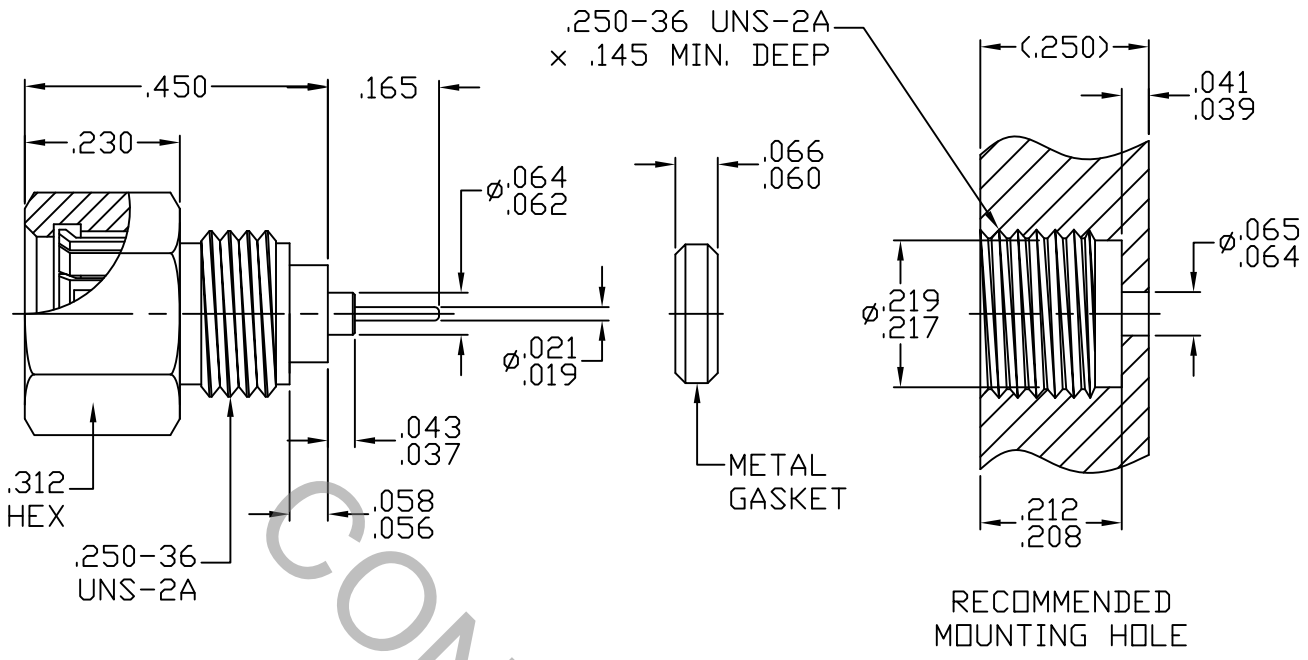
SPECIFICATION CONTROL DRAWING



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1. MATING

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

2. ELECTRICAL

FREQUENCY RANGE GHz	DC TO 26.5 GHz.
VSWR (MAX.) ❋	1.06 + .010 x FGHz. FULLY MATED
INSERTION LOSS (dB MAX.)	SEE SHEET 3
• BMA INTERFACE GAP (.000 to .015)	.040 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)	5,000
CONTACT RESISTANCE	
• CENTER CONTACT (MAX. MILLIOHMS)	12.0
• OUTER CONTACT (MAX. MILLIOHMS)	2.0

❋ TERMINATED IN A 50 OHM LOAD

RoHS COMPLIANT

REV.	DCN NO.	DATE	APP.
AA	07-1634	6/21/07	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 6/21/07

APPROVED DC DATE 6/21/07

TITLE
BMA JACK,
HERMETIC SPARK PLUG,
WITH METAL GASKET

CODE IDENT. 2J899

SHEET 1 OF 3

DWG. NO. 6730-0431-6421

SPECIFICATION CONTROL DRAWING

3. MECHANICAL

CAPTIVATION–CENTER CONTACT	
● MIN. AXIAL FORCE	6.0 LBS.
● MIN. RADIAL TORQUE	1.5 IN. OZS.
DYNAMATE ENGAGEMENT FORCES	
● INSERTION (MAX. OUNCES)	48.0
● WITHDRAWAL (MIN. OUNCES)	2.0
DYNAMATE DURABILITY (MIN. MATING)	1000
RECOMMENDED MATING FORCES	
● MIC PACKAGE (TORQUE)	20–22 IN. LBS.

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)
HERMETICITY	1 x 10^{-8} cc/SEC.

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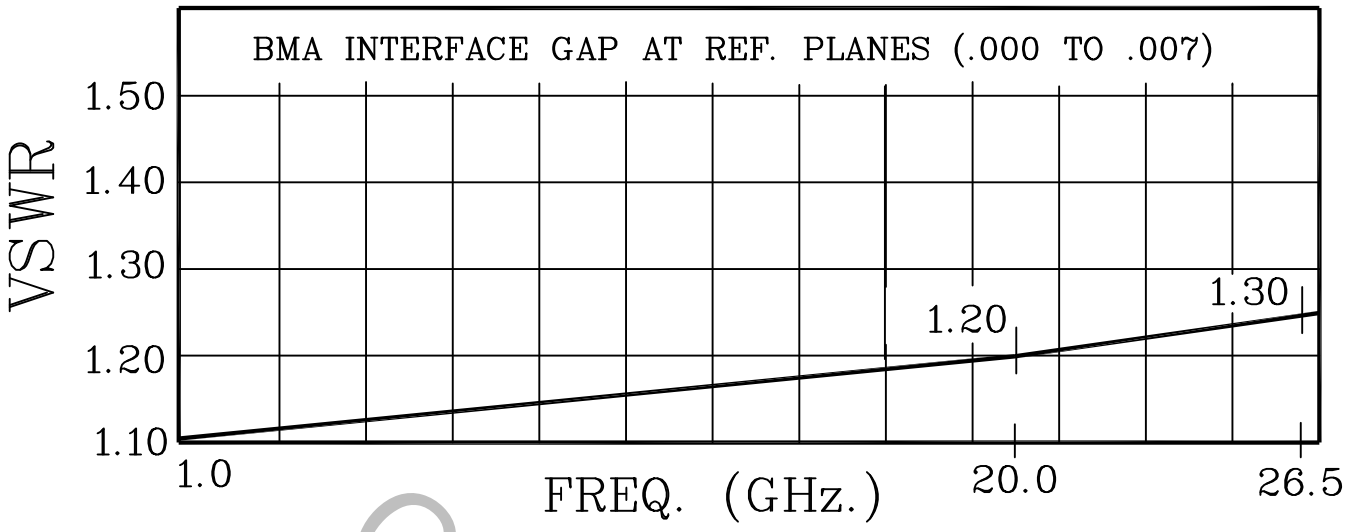
5. MATERIAL

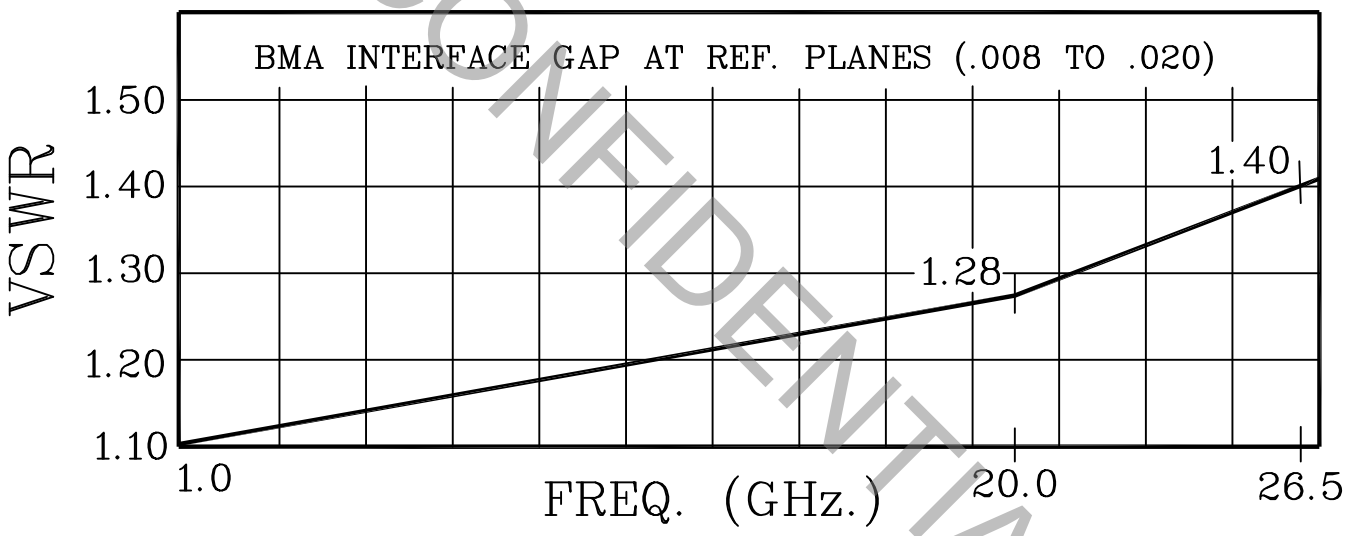
CONNECTOR BODY	STAINLESS STEEL PER ASTM–A–582, TYPE 303, COND. A.
CENTER CONTACT AND SPRING FINGERS	BERYLLIUM COPPER PER ASTM–B196/B, 196M–03, COPPER ALLOY No. UNS17300, TEMPER TD04.
INSULATOR	TEFLON PER ASTM–D 1710–02, TYPE 1, GRADE 1, CLASS B.
GLASS	CORNING 7070
GLASS PIN	KOVAR
CONTACT HOOD	BRASS PER ASTM–B–16, TEMPER H02, ALLOY C36000.
METAL GASKET	CARBON STEEL PER B113, CASE HARDENED.
GASKET	SILICONE RUBBER PER ZZ–R–765.

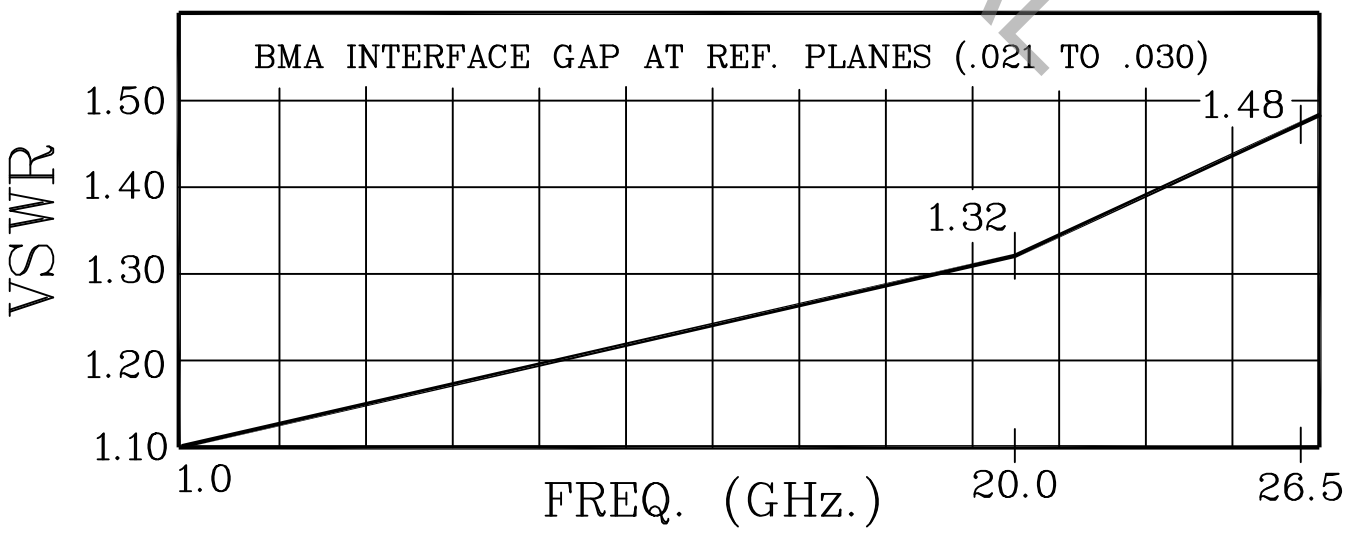
6. FINISH

CONNECTOR BODY & GLASS PIN	GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 1.25 (.000050 MIN. THICKNESS) OVER NICKEL PER QQ–N–290 (.000150 MIN. THICKNESS) OVER COPPER PER MIL–C–14550 (.000010 MIN. THICKNESS).
CENTER CONTACT, HOOD & SPRING FINGERS	GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 2.5 (.000100 MIN. THICKNESS) OVER NICKEL PER QQ–N–290 (.000050 MIN. THICKNESS) OVER COPPER PER MIL–C–14550 (.000010 MIN. THICKNESS).
INSULATOR, GLASS & GASKET	N/A
METAL GASKET	NICKEL PER MIL–C–26074, CLASS 1 (.000100 MIN. THICKNESS) OVER COPPER PER MIL–C–14550

SPECIFICATION CONTROL DRAWING







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