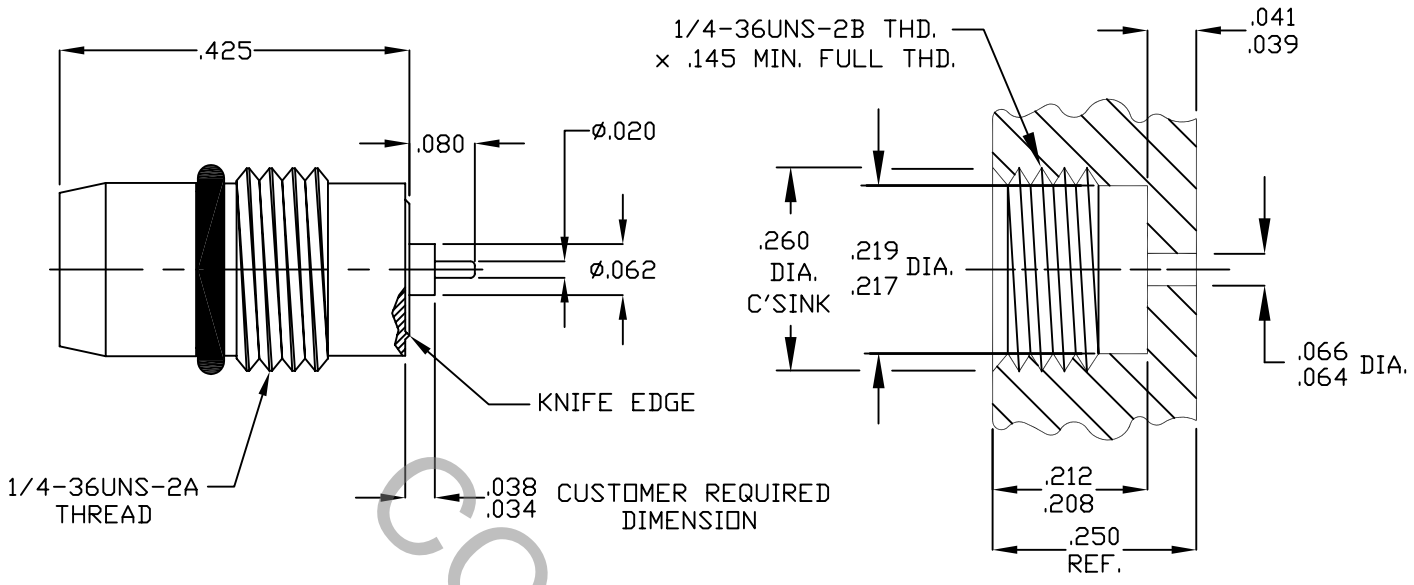
SPECIFICATION CONTROL DRAWING



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1. MATING

INTERFACE DIMENSIONS MIL-STD-348 Fig. 321.1 (BMA, PLUG).

2. ELECTRICAL

FREQUENCY RANGE GHz	DC TO 26.5 GHz
VSWR (MAX.) ❋	SEE SHEET 3
INSERTION LOSS (dB MAX.)	
• 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)	10,000
CONTACT RESISTANCE	
• CENTER CONTACT (MAX. MILLIOHMS)	12.0
• OUTER CONTACT (MAX. MILLIOHMS)	2.0

❋ TERMINATED IN A 50 OHM LOAD

REV.	DCN NO.	DATE	APP.
AA	08-1631	7/7/08	TS

DIMENSIONS ARE IN INCHES
TOLERANCES

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

dynawave INCORPORATED
HAVERHILL, MA 01835

DRAWN TS DATE 7/7/08

APPROVED DC DATE 7/7/08

TITLE BMA, PLUG
HERMETICALLY SEALED
SPARK PLUG
WITH KNIFE EDGE

CODE IDENT. 2J899

SHEET 1 OF 3

DWG. NO. 2830-0431-6241

SPECIFICATION CONTROL DRAWING

3. MECHANICAL

CAPTIVATION–CENTER CONTACT
- MIN. AXIAL FORCE — 6.0 LBS.
- MIN. RADIAL TORQUE — N/A

BMA ENGAGEMENT FORCES
- INSERTION (MAX. OUNCES) — INTERFACE 32.0
- WITHDRAWAL (MIN. OUNCES) — INTERFACE 2.0

BMA DURABILITY (MIN. MATING) — 1,000

RECOMMENDED MATING TORQUE — N/A
- MIC PACKAGE (TORQUE) — 22–24 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	1×10^{-8} cc/SEC.

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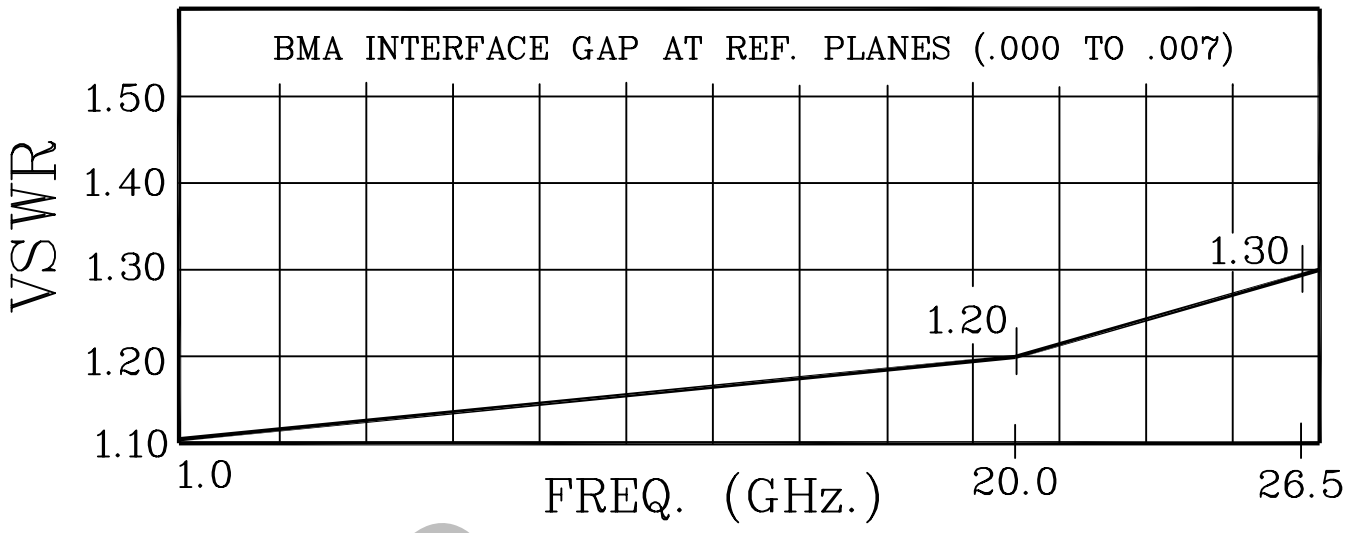
5. MATERIAL

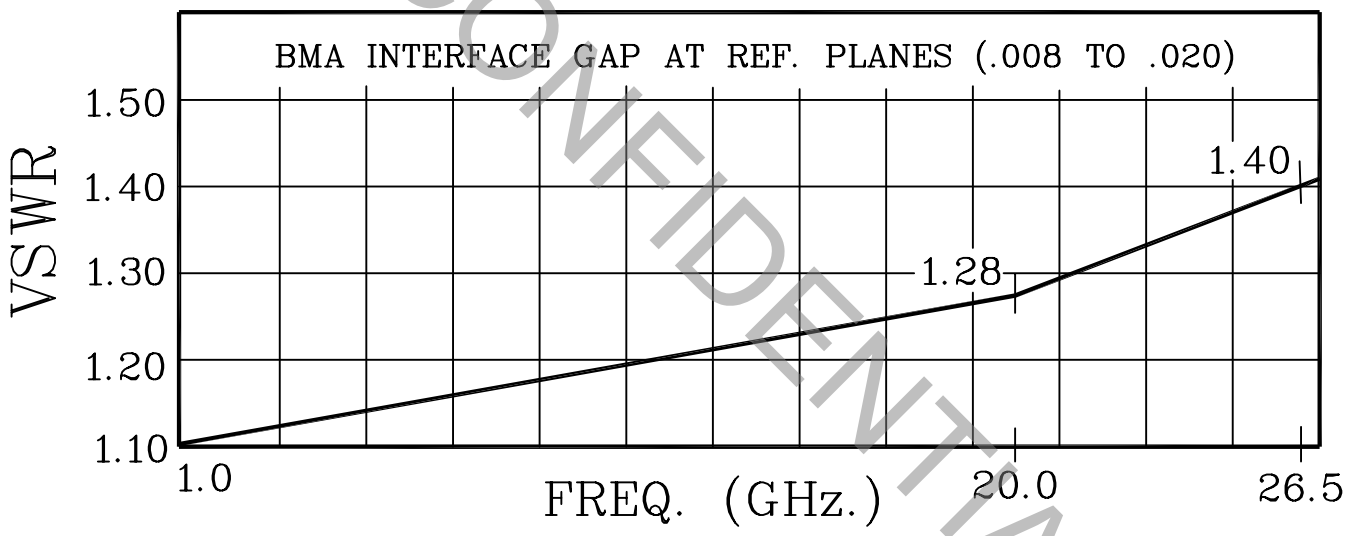
CONNECTOR BODY	STAINLESS STEEL PER ASTM A 582, TYPE 303, COND. A.
CENTER CONTACT	BERYLLIUM COPPER PER ASTM B196/B, 196M–03, COPPER ALLOY No. UNS C17300, TEMPER TD04.
GLASS	CORNING 7070
INSULATOR	TEFLON PER ASTM D 1710–02, TYPE 1, GRADE 1, CLASS B.
O'RING	SILICONE RUBBER PER ZZ–R–765, CLASS IIB

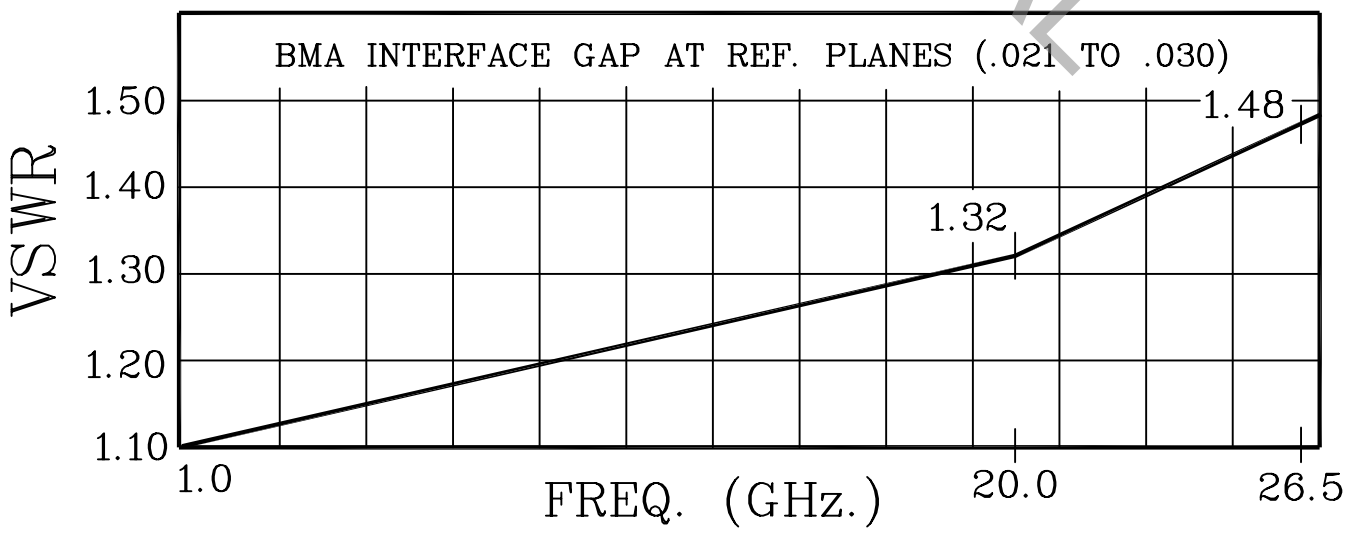
6. FINISH

CONNECTOR BODY	PASSIVATE PER AMS 00–P–35, TYPE 2
CENTER CONTACT	GOLD PER ASTM B 488, TYPE 1, GRADE C, CLASS 2.5 (.000100 Minimum Thickness) OVER NICKEL PER QQ–N–290, CLASS 1 (.000050 Minimum Thickness) OVER COPPER per MIL–C–14550 (.000050 Minimum Thickess).
INSULATOR, O'RING AND GLASS	N/A

SPECIFICATION CONTROL DRAWING







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