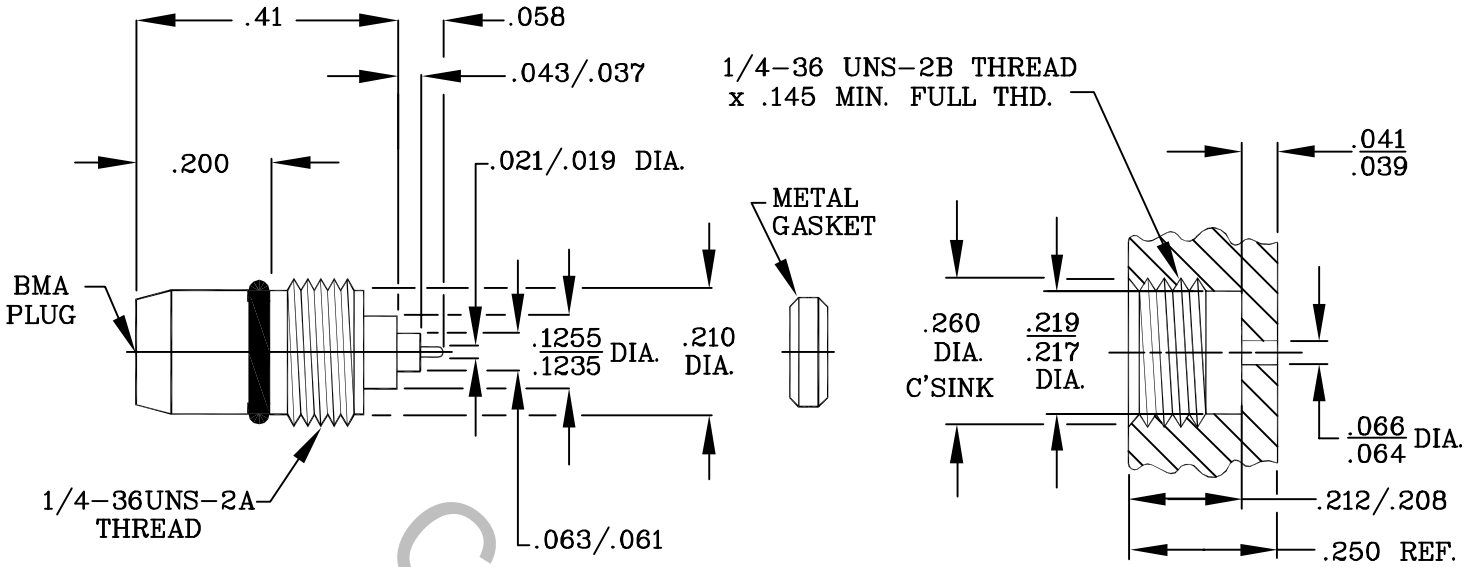
SPECIFICATION CONTROL DRAWING



MOUNTING PACKAGE DIMENSIONS

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1. MATING INTERFACE DIMENSIONS PER MIL-STD 348A, 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 $\sqrt{\text{FGHz}}$
• BMA INTERFACE GAP (.016 to .030)	.060 dB x $\sqrt{\text{FGHz}}$
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

RoHS COMPLIANT

REV.	DCN NO.	DATE	APP.
-	900	11/92	TS
A	901	11/92	MB
AA	12-1425	5/24/12	TS

DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS: .X ±.030, .XX ±.010, .XXX ±.005
FRACTIONAL: ±1/64
ANGULAR: X° ±1°0', X°X' ±15'
SURFACE ROUGHNESS 63 √ MIL-STD 10.

dynawave INCORPORATED
HAVERHILL, MA. 01835

DRAWN TS DATE 11/92

APPROVED DGG DATE 11/92

TITLE: BMA, PLUG HERMETICALLY SEALED SPARK PLUG WITH METAL GASKET

CODE IDENT. 2J899

Sheet 1 of 3

DWG. NO. 2830-0431-6822

SPECIFICATION CONTROL DRAWING

3. MECHANICAL

CAPTIVATION–CENTER CONTACT	
• MIN. AXIAL FORCE (BOTH)	6.0 LBS.
• MIN. RADIAL TORQUE	N/A
BMA ENGAGEMENT FORCES	
• INSERTION (MAX. OUNCES)	INTERFACE 48.0
• WITHDRAWAL (MIN. OUNCES)	INTERFACE 2.0
BMA DURABILITY (MIN. MATING)	1,000
RECOMMENDED MATING TORQUE	N/A
• MIC PACKAGE (TORQUE)	22–24 IN. LBS.
RECOMMENDED MOUNTING 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 x 10^{-8} cc/SEC.

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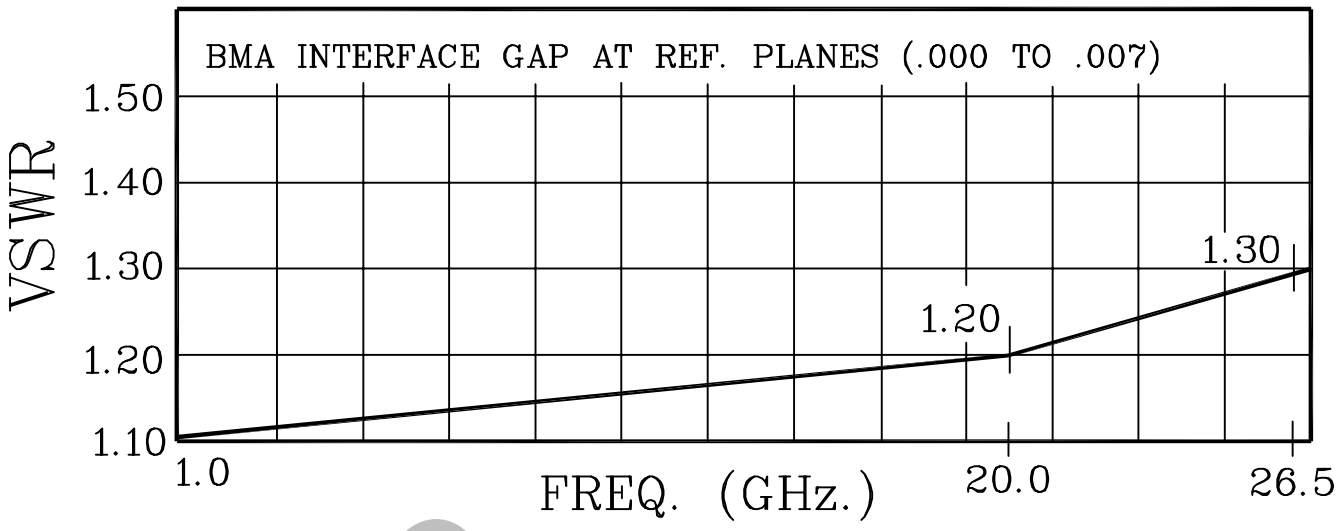
5. MATERIAL

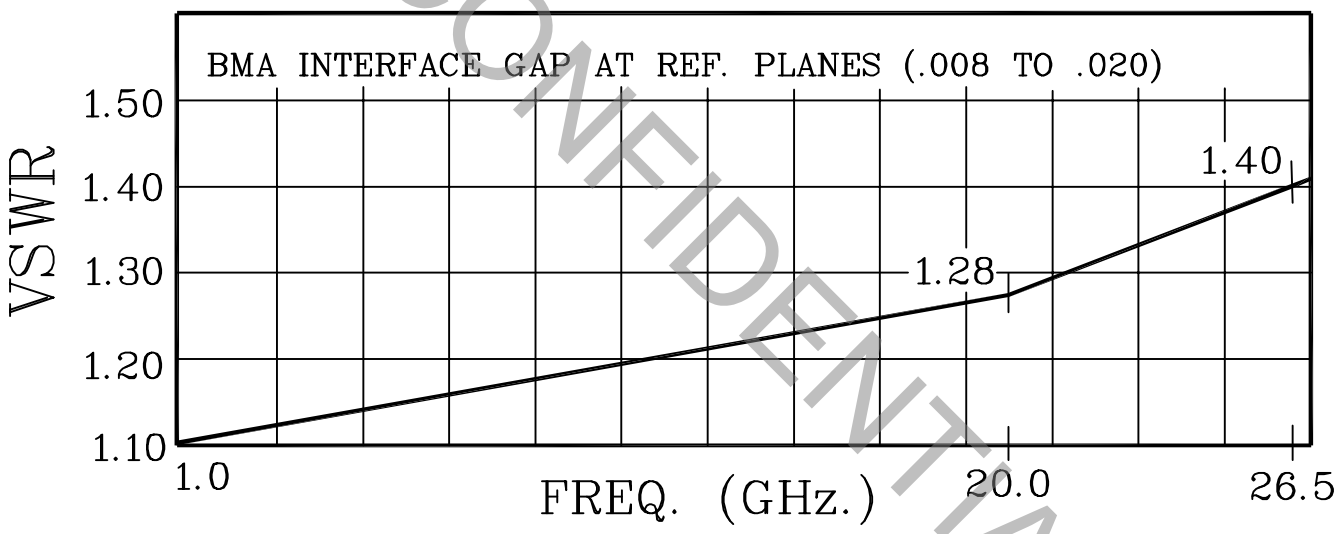
CONNECTOR BODY	STAINLESS STEEL PER ASTM–A–582, TYPE 303, COND. A
CENTER CONTACT	BERYLLIUM COPPER PER ASTM–B–196/B, 196M–03, COPPER ALLOY No. UNS–C17300, TEMPER TD04.
METAL GASKET	COLD ROLLED STEEL PER AISI C1215, CASE HARDENED
INSULATOR	TEFLON PER ASTM–D–1710–02, TYPE 1, GRADE 1, CLASS B.
O'RING	SILICONE RUBBER PER ZZ–R–765.

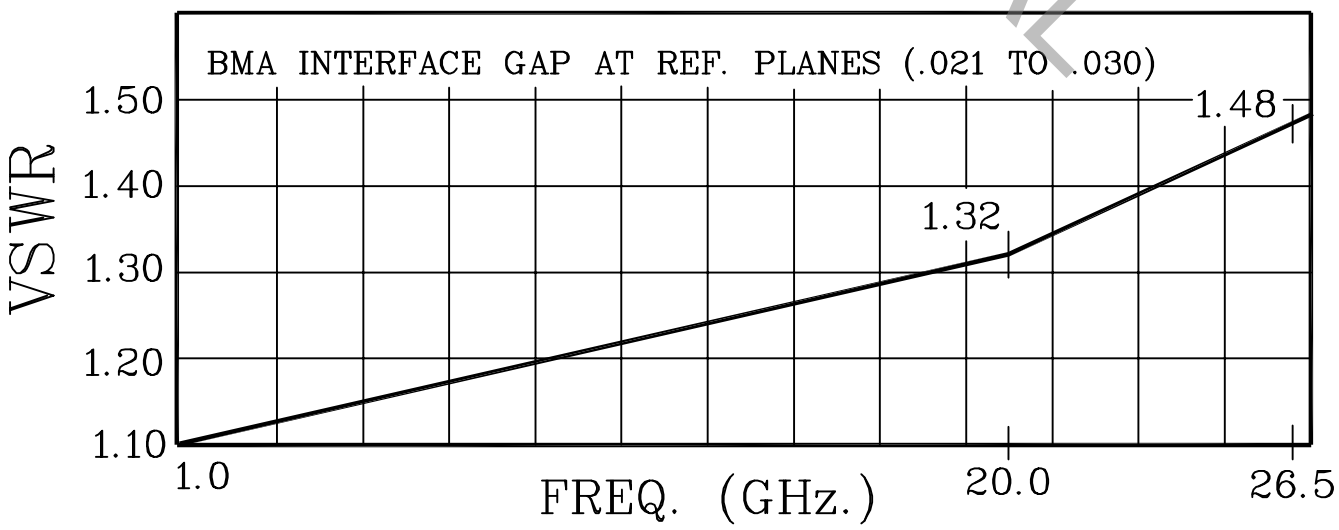
6. FINISH

CONNECTOR BODY	PASSIVATE PER AMS–2700, TYPE 2, 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.)
METAL GASKET	GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 1.27 (.000050–.000075 THK.) OVER NICKEL PER SAE–AMS–QQ–N–290 CLASS 1 (.00010 MIN. THK.) OVER COPPER PER AMS–2418 (.000040 MIN. THK.)
INSULATOR, O'RING	N/A

SPECIFICATION CONTROL DRAWING







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