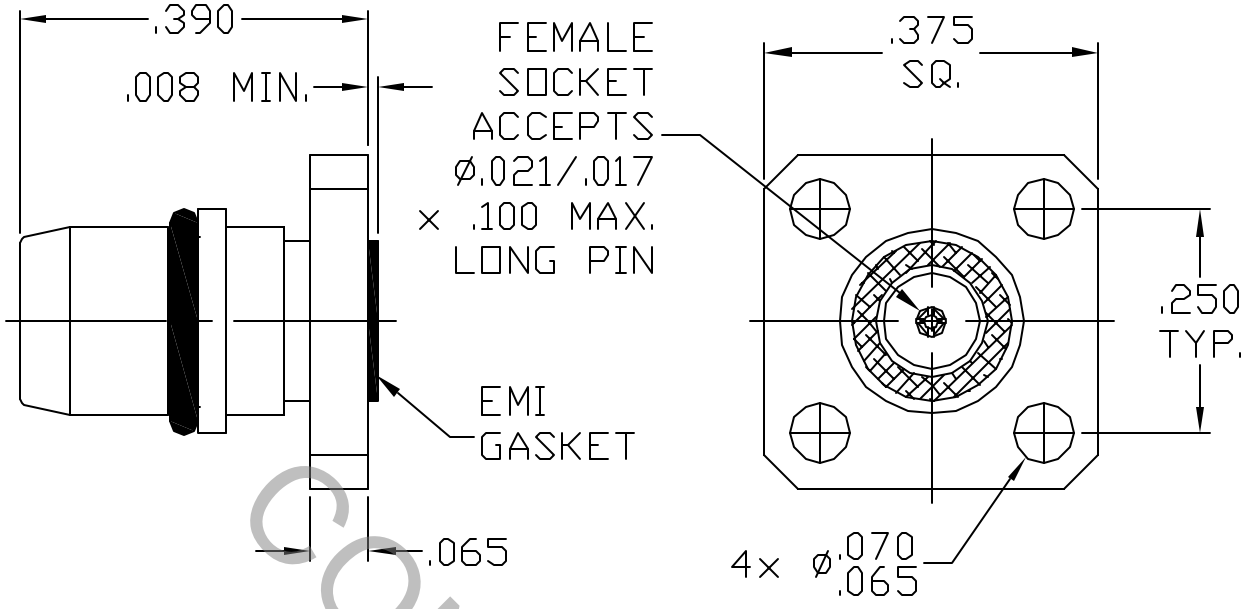
SPECIFICATION CONTROL DRAWING



CONFIDENTIAL

1. MATING

INTERFACE DIMENSIONS Per 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.)	
• DYNAMATE INTERFACE GAP (.000 TO .015)	.035 dB x $\sqrt{FGHz}$
• DYNAMATE INTERFACE GAP (.016 TO .030)	.050 dB x $\sqrt{FGHz}$
NOMINAL IMPEDANCE (OHMS)	50
VOLTAGE RATING (MAX. VRMS)	250
RF LEAKAGE (MIN. dB DOWN)	
• DYNAMATE INTERFACE BOTTOMED (.000 GAP)	−100 dB − FGHz
• DYNAMATE INTERFACE GAP (.001 TO .015)	−90 dB − FGHz
• DYNAMATE 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)	6.0
• OUTER CONTACT (MAX. MILLIOHMS)	2.0

❁ TERMINATED IN A 50 OHM LOAD

REV.	DCN NO.	DATE	APP.
AA	05-1982	9/29/05	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: 9/29/05

APPROVED: DC DATE: 9/29/05

TITLE
BMA PLUG, 4 HOLE, FIELD REPLACEABLE, WITH EMI GASKET

CODE IDENT. 2J899

SHEET 1 OF 3

DWG. NO. 2854-0781-6227

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) — INTERFACE 32.0, REAR 32.0
- WITHDRAWAL (MIN. OUNCES) — INTERFACE 2.0, REAR 1.0

BMA DURABILITY (MIN. MATING) — 1,000

RECOMMENDED MATING TORQUE — N/A

CONFIDENTIAL

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)

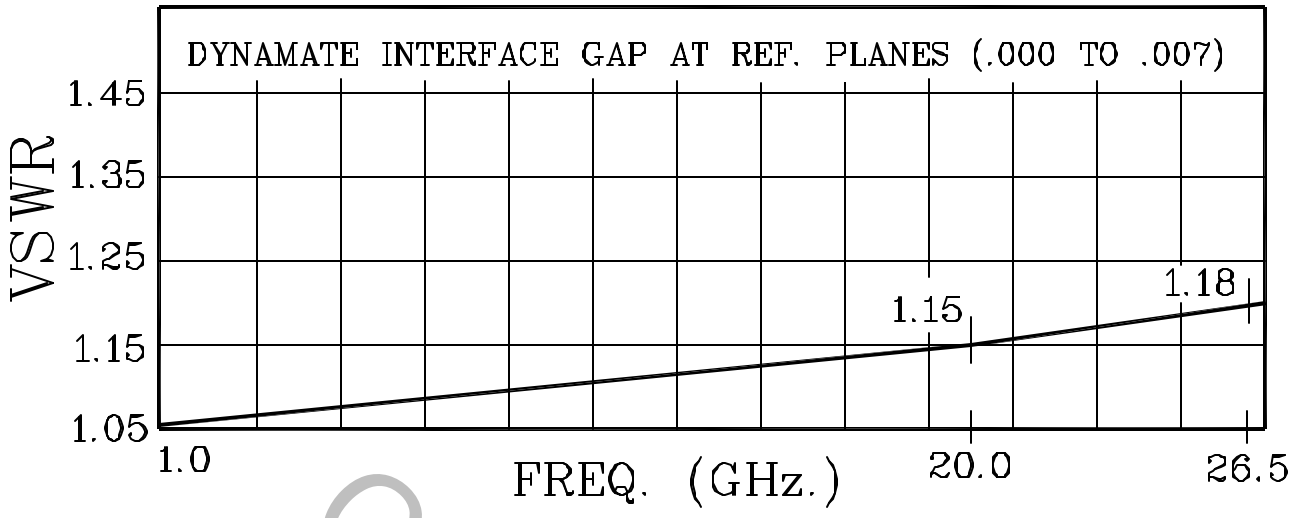
5. MATERIAL

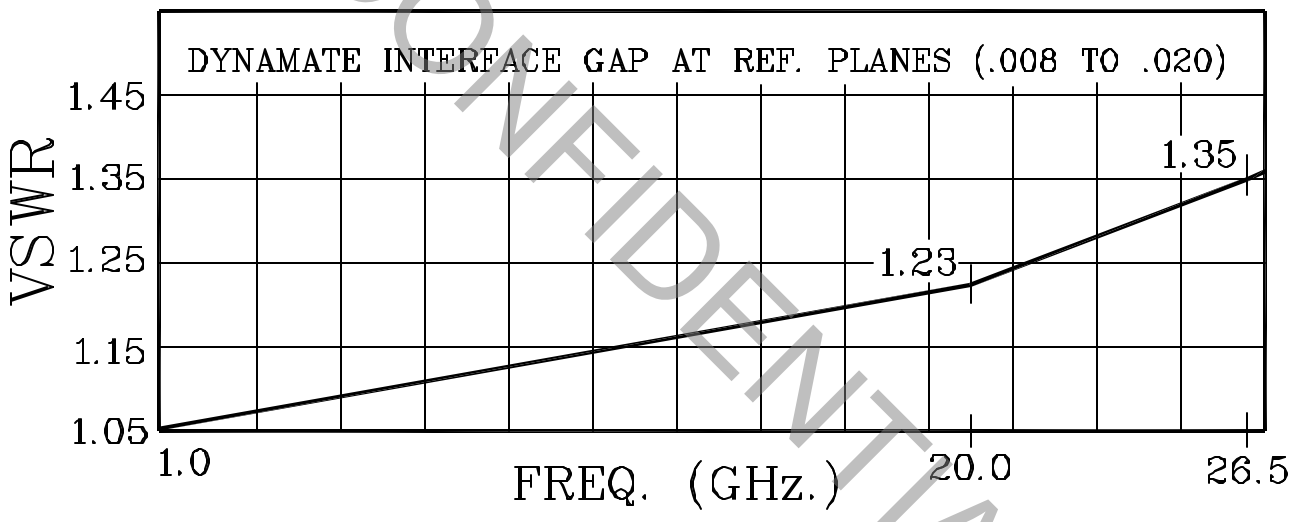
CONNECTOR BODY	STAINLESS STEEL PER ASTM–A–582, TYPE 303, COND. A.
CENTER CONTACT	BERYLLIUM COPPER PER QQ–C–530, ALLOY 173 COND. HT
INSULATOR	TEFLON PER ASTM–D–1457
O'RING	NITRILE (BUNA–N)
EMI GASKET	SILVER PLATED ALUMINUM IN SILICONE RUBBER

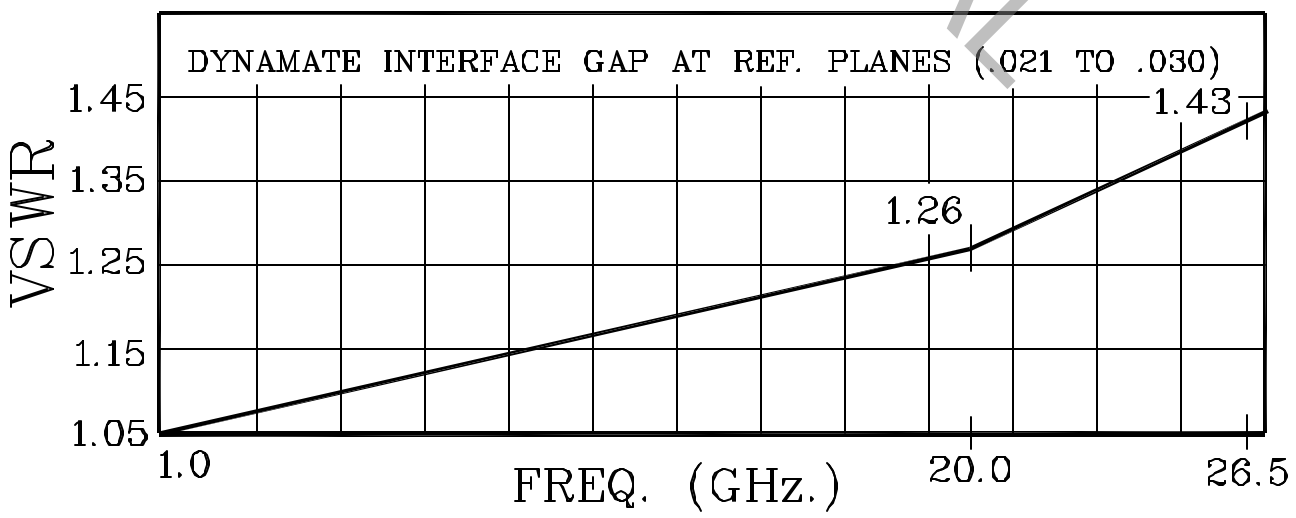
6. FINISH

CONNECTOR BODY	PASSIVATE PER AMS QQ–P–35, TYPE 2.
CENTER CONTACT	GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 2.50 (.000100 MIN. THK.) OVER NICKEL PER QQ–N–290, (.000050 MIN. THK.) OVER COPPER PER MIL–C–14550 (.000010 MIN. THK.).
INSULATOR, GASKET AND O'RING	N/A

SPECIFICATION CONTROL DRAWING







CONFIDENTIAL

dynawave INCORPORATED	SHEET 3 OF 3	DWG. NO. 2854-0781-6227	REV. AA