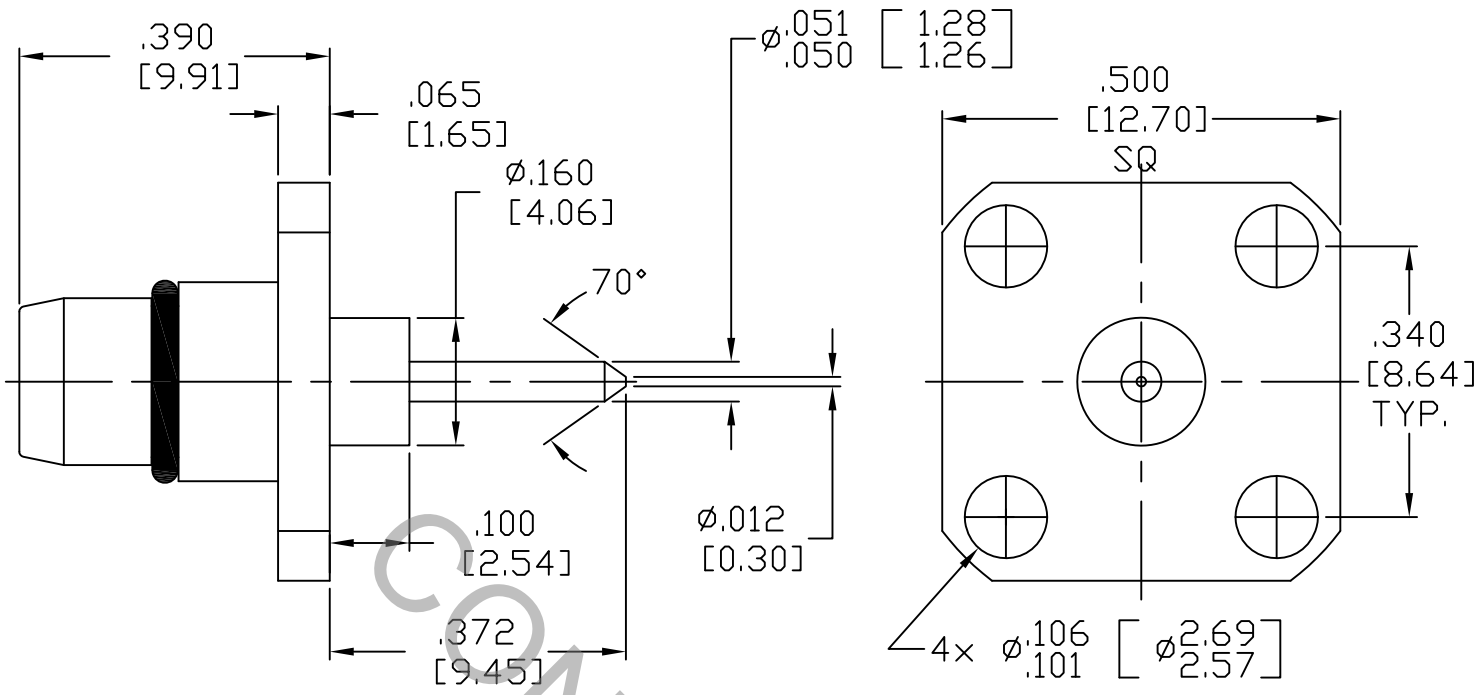
SPECIFICATION CONTROL DRAWING



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1. MATING INTERFACE DIMENSIONS Per MIL-STD-348 Fig. 321.1 (BMA PLUG)

2. ELECTRICAL

FREQUENCY RANGE GHz	DC TO 20.0 GHz
VSWR (MAX.) ❋	1.10 +.010 FGHz.
INSERTION LOSS (dB MAX.)	
• BMA INTERFACE GAP (.000 TO .015)	.035 dB x $\sqrt{FGHz}$
• BMA INTERFACE GAP (.016 TO .030)	.050 dB x $\sqrt{FGHz}$
NOMINAL IMPEDANCE (OHMS)	50
VOLTAGE RATING (MAX. VRMS)	335
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 + 150°c
DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS)	1,000
INSULATION RESISTANCE (MIN. MEGOHMS)	5,000
CONTACT RESISTANCE	
• CENTER CONTACT (MAX. MILLIOHMS)	3.0
• OUTER CONTACT (MAX. MILLIOHMS)	2.0

❋ TERMINATED IN A 50 OHM LOAD

RoHS COMPLIANT

This Document contains proprietary and confidential information.

REV.	DCN NO.	DATE	APP.
AA	06-1174	2/14/06	DC
AB	14-1091	1/20/14	TS
BA	14-1130	1/29/14	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: DC DATE: 2/14/06

APPROVED: DC DATE: 2/14/06

TITLE
BMA PLUG, 4 HOLE, FLANGE, ø.050 PIN TERMINAL

CODE IDENT. 2J899

SHEET 1 OF 2

DWG. NO. 2854-0031-6201

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) — 2.0

BMA DURABILITY (MIN. MATING) — 1,000

RECOMMENDED MATING TORQUE — N/A

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.) (250 VRMS)

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5. MATERIAL

CONNECTOR BODY	STAINLESS STEEL PER ASTM–A–479, TYPE 316L
CENTER CONTACT	BERYLLIUM COPPER PER ASTM–B–196/B, 196M–03, COPPER ALLOY No. UNS–C17300, TEMPER TD04.
INSULATOR	TEFLON PER ASTM–D–1710–02, TYPE 1, GRADE 1, CLASS B.
O'RING	NITRILE (BUNA–N)

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.)
INSULATOR AND O'RING	N/A