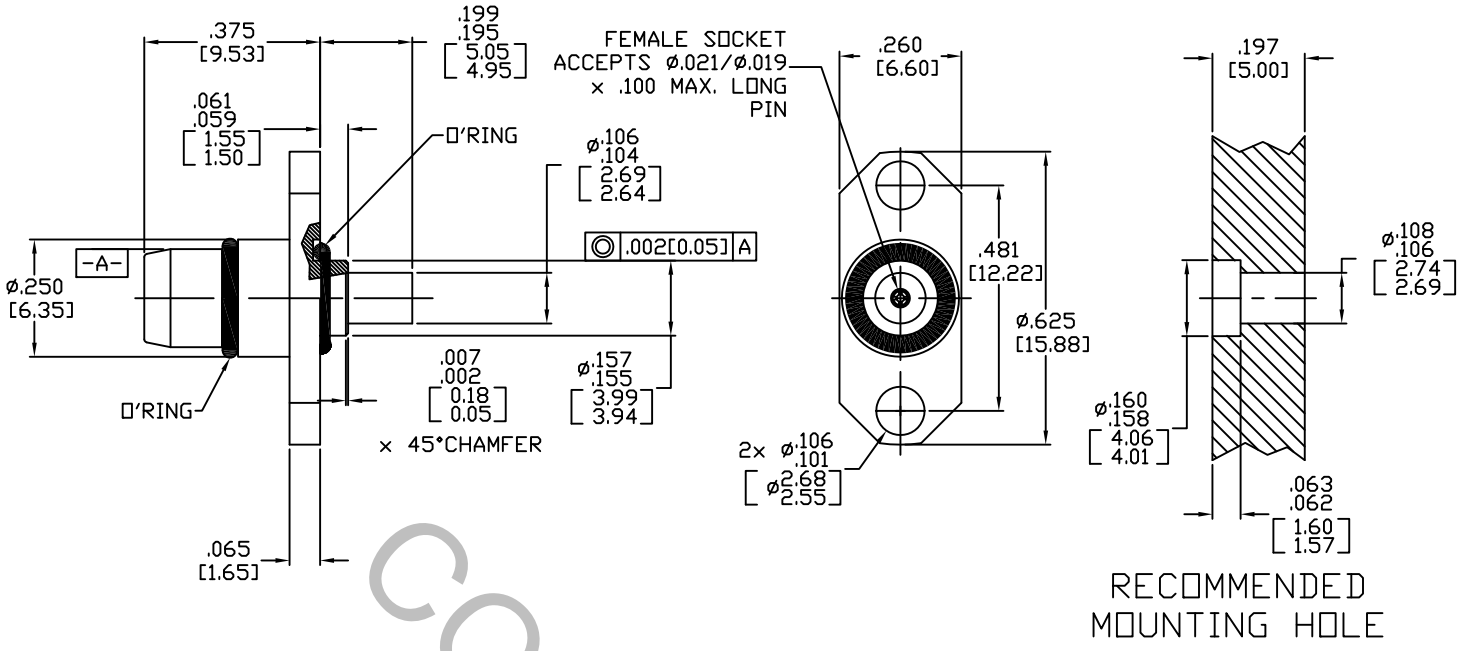
SPECIFICATION CONTROL DRAWING



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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.FULLY MATED) ❋	1.05 + .005 x FGHz.
INSERTION LOSS (dB MAX.)	
• BMA INTERFACE GAP (.000 TO .015)	.040 dB x $\sqrt{FGHz}$
• BMA INTERFACE GAP (.016 TO .030)	.050 dB x $\sqrt{FGHz}$
NOMINAL IMPEDANCE (OHMS)	50
VOLTAGE RATING (MAX. VRMS)	333
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)	1,000
INSULATION RESISTANCE (MIN. MEGOHMS)	5,000
CONTACT RESISTANCE	
• CENTER CONTACT (MAX. MILLIOHMS)	6.0
• 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	17-1958	8/14/17	TS
AB	17-2211	10/17/17	TS
AC	17-2232	10/23/17	TS
AD	17-2242	10/25/17	TS
AE	17-2260	11/2/17	TS
AF	17-2437	12/19/17	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: 8/14/17

APPROVED: DC DATE: 8/14/17

TITLE
BMA PLUG, 2 HOLE
FLANGE PIN TERMINAL
WITH REAR O-RING SEAL

CODE IDENT. 2J899

SHEET 1 OF 3

DWG. NO. 2852-0631-6207

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)	N/A
• WITHDRAWAL (MIN. OUNCES)	N/A
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 + 165°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–582, TYPE 303, COND. A.
CENTER CONTACT	BERYLLIUM COPPER PER ASTM B 196/B, 196M–03, COPPER ALLOY No. UNS 17300, TEMPER TD04.
INSULATOR	TEFLON PER ASTM D 1710–02, TYPE 1, GRADE 1, CLASS B.
O'RING	NITRILE (BUNA–N)
FLANGE O'RING	SILICONE PER AMS 3304.

6. FINISH

CONNECTOR BODY	PASSIVATE PER AMS–2700, TYPE 2, CLASS 4
CENTER CONTACT	GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 1.25 (.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, O'RING AND FLANGE O'RING	N/A