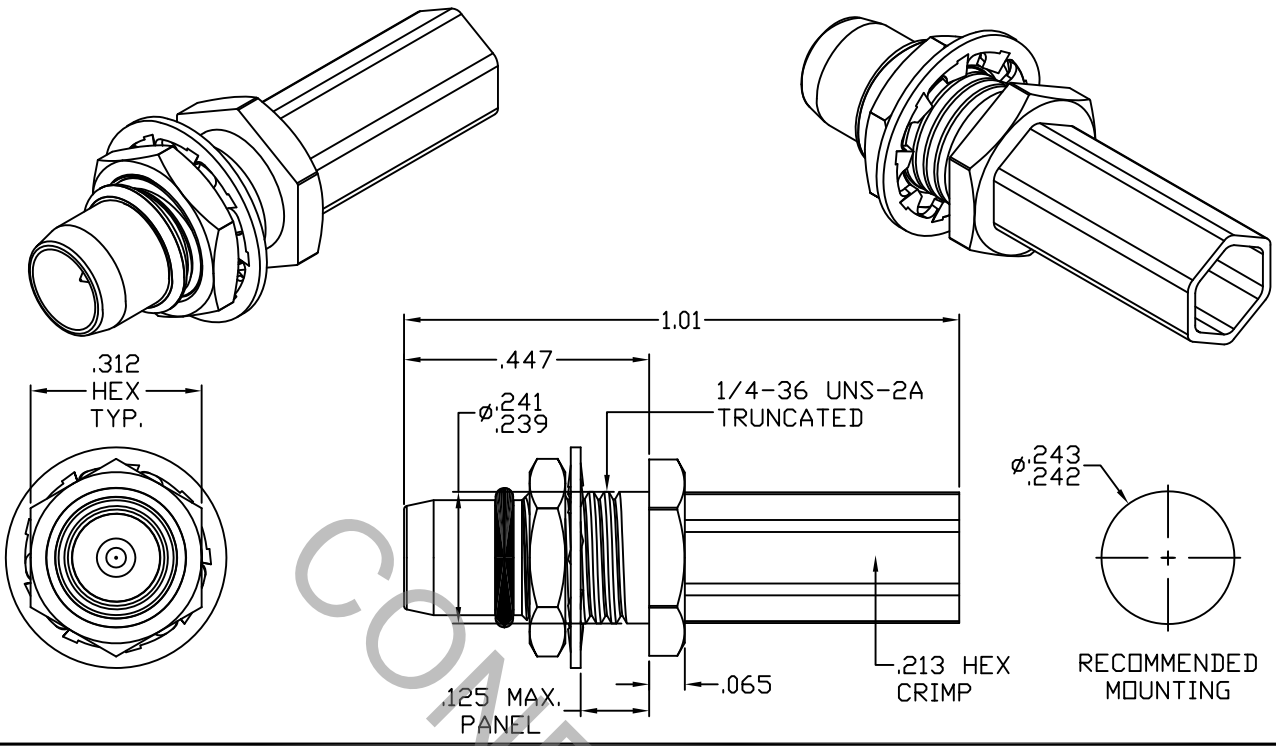
SPECIFICATION CONTROL DRAWING



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

2. ELECTRICAL

FREQUENCY RANGE GHz	DC TO 12.4 GHz
VSWR (MAX.) ❋	1.10 + .015 x FGHz
INSERTION LOSS (dB MAX., .000 TO .015 GAP)❋	.04 dB x $\sqrt{\text{FGHz}}$
INSERTION LOSS (dB MAX., .016 TO .030 GAP)❋	.06 dB x $\sqrt{\text{FGHz}}$
NOMINAL IMPEDANCE (OHMS)	50
VOLTAGE RATING (MAX. VRMS)	333
RF LEAKAGE (MIN. dB DOWN)	−100 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)	3.0
• OUTER CONTACT (MAX. MILLIOHMS)	2.0

❋ TERMINATED IN A 50 OHM LOAD

RoHS
COMPLIANT

REV.	DCN NO.	DATE	APP.
AA	06-1539	12/8/06	TS
AB	11-1882	10/5/11	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 TS DATE 12/8/06

APPROVED DC DATE 12/8/06

TITLE
BMA PLUG,
BULKHEAD, CRIMP,
RG58, 142, 223 & 400

CODE IDENT. 2J899

SHEET 1 OF 2

DWG. NO. 2810-4230-6231

SPECIFICATION CONTROL DRAWING

3. MECHANICAL

CAPTIVATION–CENTER CONTACT
- MIN. AXIAL FORCE — 4.5 LBS.
- MIN. RADIAL TORQUE — N/A

CENTER CONTACT AXIAL FORCES
- INSERTION (MAX. OUNCES) — N/A
- WITHDRAWAL (MIN. OUNCES) — N/A

CONNECTOR ENGAGEMENT/DISENGAGEMENT (MAX. LBS.) — N/A
CONNECTOR DURABILITY (MIN. CYCLES) — 500
RECOMMENDED MATING TORQUE — N/A
RECOMMENDED MOUNTING TORQUE — 22 – 28 IN. LBS.

4. ENVIRONMENTAL

TEMPERATURE CYCLING	MIL–STD–202, METHOD 107, 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

BODY & HEX NUT	STAINLESS STEEL PER ASTM–A–582, TYPE 303, COND. A
CONTACTS	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	SILICONE RUBBER PER ZZ–R–765.
LOCKWASHER	400 SERIES STAINLESS STEEL
CRIMP SLEEVE	BRASS PER ASTM–B–16, TEMPER H02, ALLOY C36000.
SHRINK TUBING	MIL–I–23053/5 CLASS 1, BLACK

6. FINISH

BODY, LOCKWASHER & HEX NUT	PASSIVATE PER AMS–2700, TYPE 2, CLASS 4.
CRIMP SLEEVE	NICKEL PER SAE–AMS–QQ–N–290, CLASS 1 (.000200 MIN. THK.) OVER COPPER PER AMS–2418 (.000010 MIN. THK.)
CONTACTS	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, O–RING & TUBING	N/A