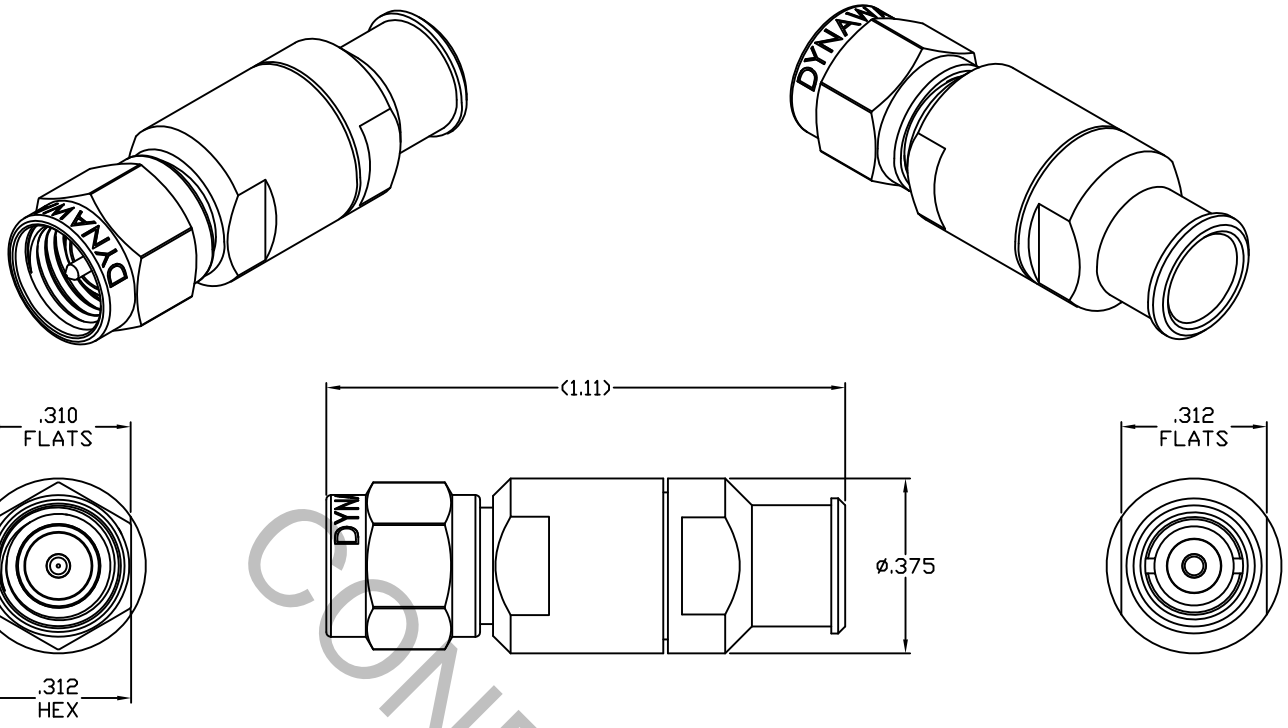
SPECIFICATION CONTROL DRAWING



CONFIDENTIAL

1. MATING

INTERFACE DIMENSIONS Per MIL-STD-348 Fig. 310.1 (SMA PLUG).

2. ELECTRICAL

FREQUENCY RANGE GHz	DC TO 12.4 GHz
VSWR (MAX.) ❋	1.05 + .008 x FGHz
INSERTION LOSS (dB MAX.)	.03 dB x $\sqrt{\text{FGHz}}$
NOMINAL IMPEDANCE (OHMS)	50
VOLTAGE RATING (MAX. VRMS)	250
RF LEAKAGE (MIN. dB DOWN)	100 dB - FGHz
TEMPERATURE RATING (DEGREES CENTIGRADE)	-55° c TO + 165° c
DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS)	750
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	18-1149	1/31/18	DC

DIMENSIONS ARE IN INCHES
TOLERANCES

DECIMALS	FRACTIONAL	ANGULAR
.X ± .030	± 1/64	X ± 1°
.XX ± .010		X' ± 15'
.XXX ± .005		

dynawave INCORPORATED
HAVERHILL, MA. 01835

DRAWN: RMS DATE: 1/30/18

APP.: DC DATE: 1/31/18

TITLE
SMA, PLUG, STRAIGHT
SOLDER CLAMP
RG-142, 400 FLEXIBLE

CODE IDENT. 2J899

SHEET 1 OF 2

DWG. NO. 9800-4245-6201

SPECIFICATION CONTROL DRAWING

3. MECHANICAL

CAPTIVATION-CENTER CONTACT	
MAX. AXIAL FORCE	6.0 LBS.
MAX. RADIAL TORQUE	N/A
CENTER CONTACT AXIAL FORCES	
● INSERTION (MAX. OUNCES)	N/A
● WITHDRAWAL (MIN. OUNCES)	N/A
CONNECTOR ENGAGEMENT/DISENGAGEMENT(MAX. IN. LBS.)	2.0
CONNECTOR DURABILITY (MIN. CYCLES)	500
RRECOMMENDED MATING TORQUE	7 - 10 IN. LBS.

4. ENVIRONMENTAL

TEMPERATURE CYCLING	MIL-STD-202, METHOD 102, COND. C (-55° c TO + 120° 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)

CONFIDENTIAL

5. MATERIAL

BODY, COUPLING NUT, CLAMP NUT & SLEEVE	STAINLESS STEEL PER ASTM-A-582, TYPE 303, COND. A
CONTACT & RETAINING RING	BERYLLIUM COPPER PER ASTM B196/B 196M-03, COPPER ALLOY NO. UNS C17300 TEMPER TD04
SOLDER SLEEVE	BRASS PER ASTM B16, TEMPER H02, ALLOY C36000
INSULATORS	TEFLON PER ASTM-D-1710, TYPE 1, GRADE 1, CLASS B
GASKET & O-RING	SILICONE RUBBER PER ZZ-R-765

6. FINISH

BODY, COUPLING NUT, CLAMP NUT & SLEEVE	PASSIVATE PER AMS-2700, TYPE 2, CLASS 4
SOLDER SLEEVE	GOLD PER ASTM B 488, TYPE 1, CODE C, CLASS 1.27 (.000050 MIN. THK.) OVER NICKEL PER SAE-AMS-QQ-N-290 CLASS 1 (.000150 MIN. THK.) OVER COPPER PER AMS-2418 (.000010 MIN. THK.).
CONTACT	GOLD PER ASTM B 488, TYPE 1, 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.).
INSULATORS, RETAINING RING, GASKET & O-RING	N/A