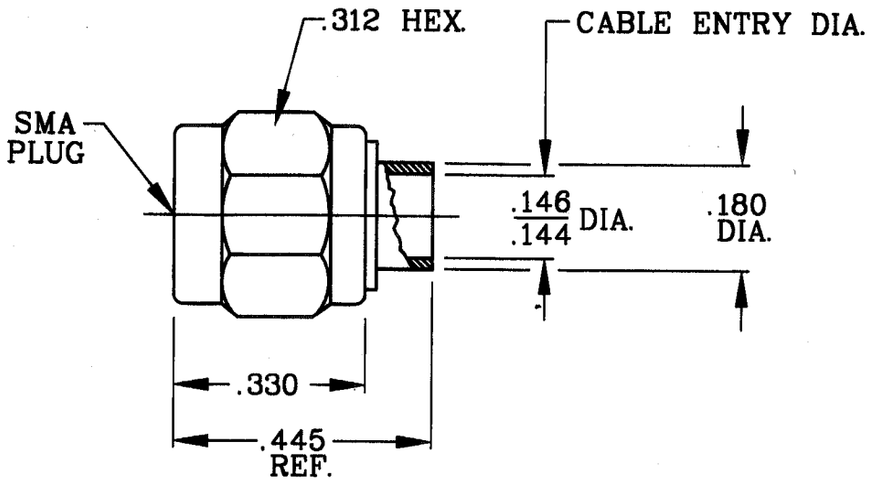
SPECIFICATION CONTROL DRAWING



1. MATING INTERFACE DIMENSIONS FOR PLUG PER MIL-STD-348 (Fig. 310-1) AND DYNAWAVE MD-98.

2. ELECTRICAL

FREQUENCY RANGE GHz	DC TO 34.0 GHz.
VSWR (MAX.) *	1.05 + .005 x FGHz.
INSERTION LOSS (dB MAX.)	.03 dB x $\sqrt{FGHz}$.
NOMINAL IMPEDANCE (OHMS)	50
VOLTAGE RATING (MAX. VRMS)	335
RF LEAKAGE (MIN. dB DOWN)	100 dB - FGHz.
TEMPERATURE RATING (DEGREES CENTIGRADE)	-65 ° c TO +165 ° c
DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS)	1,500
INSULATION RESISTANCE (MIN. MEGOHMS)	10,000
CONTACT RESISTANCE	
• CENTER CONTACT (MAX. MILLIOHMS)	3.0
• OUTER CONTACT (MAX. MILLIOHMS)	2.0

* TERMINATED IN A 50 OHM LOAD

REV.	DCN NO.	DATE	APP.
AA	02-0214	3/26/02	BS

DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS: .X ± .030, .XX ± .010, .XXX ± .005
FRACTIONAL: ±1/64
ANGULAR: X° ±1°0', X°.X ± 15'
SURFACE ROUGHNESS 63 √ MIL-STD 10.

dynawave INCORPORATED
HAVERHILL, MA. 01835

DRAWN KLT DATE 3/25/02
APPROVED BS DATE 3/26/02

TITLE
SMA, PLUG
TO .141 S.R. CABLE
DIRECT SOLDER ATTACHMENT

CODE IDENT. 2J899
SHEET 1 OF 2
DWG. NO. 9800-4120-2401

SPECIFICATION CONTROL DRAWING

3. MECHANICAL

CAPTIVATION–CENTER CONTACT	
• MIN. AXIAL FORCE	N/A
• MIN. 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
RECOMMENDED MATING TORQUE	7 – 10 IN. LBS.

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.) (375 VRMS)

5. MATERIAL

BODY	BRASS PER ASTM B16, TEMPER H02, ALLOY C 36000
COUPLING NUT	STAINLESS STEEL PER ASTM A 581, TYPE 303, COND. A.
CONTACT AND RETAINING RING	BERYLLIUM COPPER PER ASTM B196–90, COPPER ALLOY No. UNS C17300, TEMPER TD04.
INSULATOR	TEFLON PER ASTM D 4894–91.
GASKET	SILICONE RUBBER PER ZZ–R–765 CLASS IIB, GRADE 50 OR 60.

6. FINISH

BODY	GOLD PER ATSM B 488, TYPE 2, CODE C, CLASS 1.25 (.000050 MIN. THK.) OVER NICKEL PER QQ–N–290, CLASS 1 COPPER PER MIL–C–14550 (.000010 MIN. THK.).
CONTACT	GOLD PER ATSM B 488, TYPE II, CODE C, CLASS 2.5 (.000100 MIN. THK. OVER NICKEL PER QQ–N–290 CLASS 1 (.000050 MIN. THK.).
COUPLING NUT	GOLD PER ATSM B 488, TYPE 2, CODE C, CLASS 0.25 OVER NICKEL PER QQ–N–290 (.000050 – .00010 THK.) NICKEL (WOODS OR WATTS)(.000010 MIN. THK.).
INSULATOR, GASKET AND RETAINING RING	N/A