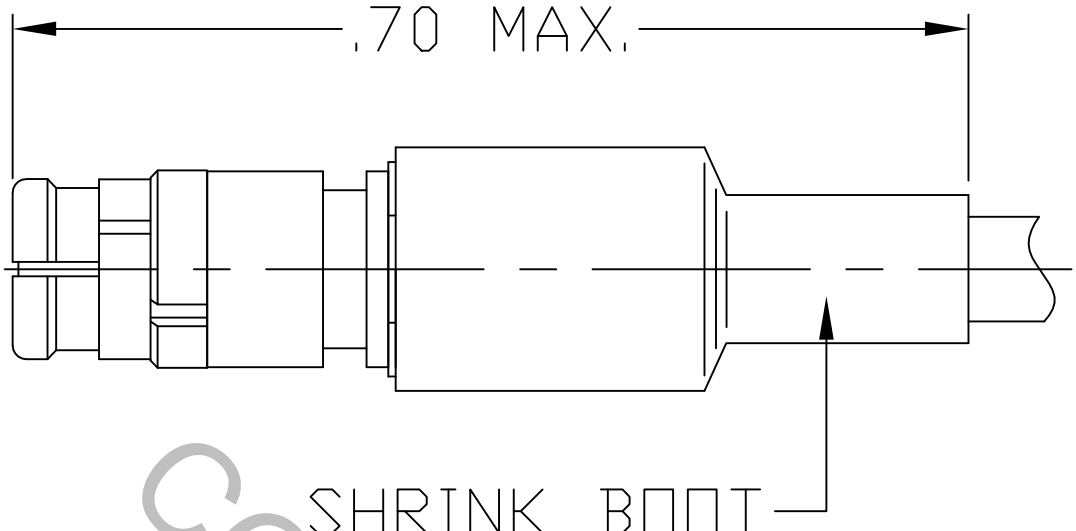
SPECIFICATION CONTROL DRAWING



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1. MATING INTERFACE DIMENSIONS PER MIL-STD-348 Fig. 326.1

2. ELECTRICAL

FREQUENCY RANGE GHz	DC TO 18.0 GHz.
VSWR (MAX.) ❋	1.05 + .010 x FGHz.
INSERTION LOSS (dB MAX.)❋	.040 dB x $\sqrt{\text{FGHz.}}$
NOMINAL IMPEDANCE (OHMS)	50
VOLTAGE RATING (MAX. VRMS)	250
RF LEAKAGE (MIN. dB DOWN)	85 dB − FGHz.
TEMPERATURE RATING (DEGREES CENTIGRADE)	−65° c TO +150° c
DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS)	500
INSULATION RESISTANCE (MIN. MEGOHMS)	2,500
CONTACT RESISTANCE	
• CENTER CONTACT (MAX. MILLIOHMS)	6.0
• OUTER CONTACT (MAX. MILLIOHMS)	2.0

❋ TERMINATED IN A 50 OHM LOAD

NOTES:
1) RG-316 IS ONLY RATED TO 3 GHz.
2) CRIMP ATTACHMENTS LIMIT FREQUENCY RESPONSE.

REV.	DCN NO.	DATE	APP.
AA	05-1530	4/28/05	DC

DIMENSIONS ARE IN INCHES
TOLERANCES

DECIMALS	FRACTIONAL	ANGULAR
.X ±.030 .XX ±.010 .XXX ±.005	±1/64	X° ±1°0' X° X̄ ±15'

SURFACE ROUGHNESS 63 √ MIL-STD 10.

dynawave INCORPORATED
HAVERHILL, MA 01835

DRAWN DC DATE 4/28/05

APPROVED DC DATE 4/28/05

TITLE
SMP, FEMALE
CRIMP ATTACHMENT
RG-178 CABLE

CODE IDENT. 2J899

SHEET 1 OF 2

DWG. NO. 2000-7830-5435

SPECIFICATION CONTROL DRAWING

3. MECHANICAL

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

CONNECTOR ENGAGEMENT FORCES
- INSERTION (MAX. LBS.) — 15.0 (FULL DETENT)
- WITHDRAWAL (MIN. LBS.) — 5.0 (FULL DETENT)

CONNECTOR DURABILITY (MIN. MATING) — 100 (FULL DETENT)

CABLE RETENSION (SOLDER) — 10.0 LBS. MIN.

4. ENVIRONMENTAL

TEMPERATURE CYCLING	MIL–STD–202, METHOD 102, COND. C (–65 ° c TO + 150 °c)
SHOCK	MIL–STD–202, METHOD 213, COND. I (100 G's)
VIBRATION (HIGH FREQUENCY)	MIL–STD–202, METHOD 204, COND. D (20 G's)
VIBRATION (RANDOM)	MIL–STD–202, METHOD 214, TEST COND. F.
THERMAL SHOCK	MIL–STD–202, METHOD 107, TEST COND. B, HIGH TEMP. +165° c.
MOISTURE RESISTANCE	MIL–STD–202, METHOD 106, LESS STEP 7b, 1000 MEGOHMS (5 MINUTES).
CORROSION	MIL–STD–202, METHOD 101, COND. B (48 HOURS)
BAROMETRIC PRESSURE (ALTITUDE)	MIL–STD–202, METHOD 105, COND. C (70,000 FT.) (90 VRMS MIN.)
CORONA LEVEL	70,000 FEET.

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5. MATERIAL

CONNECTOR BODY, CENTER CONTACT, ANTI–ROCK RING AND EMI RING	BERYLLIUM COPPER PER ASTM B196–90, COPPER ALLOY No. UNS C17300, TEMPER TD04.
CRIMP SLEEVE	BRASS PER ASTM B16, TEMPER H02, ALLOY C36000
INSULATOR	TEFLON PER D 4894.
SPACER INSULATOR	TORLON 4023
SHRINK BOOT	MIL–DTL–23053/5–104–0

6. FINISH

CONNECTOR BODY, CENTER CONTACT, ANTI–ROCK RING, EMI RING, & CRIMP SLEEVE	GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 2.5 (.00005–.000100 THK.) OVER NICKEL PER QQ–N–290 (.00005–.000100 THK.) OVER COPPER PER MIL–C–14550
INSULATORS & SHRINK BOOT	N/A