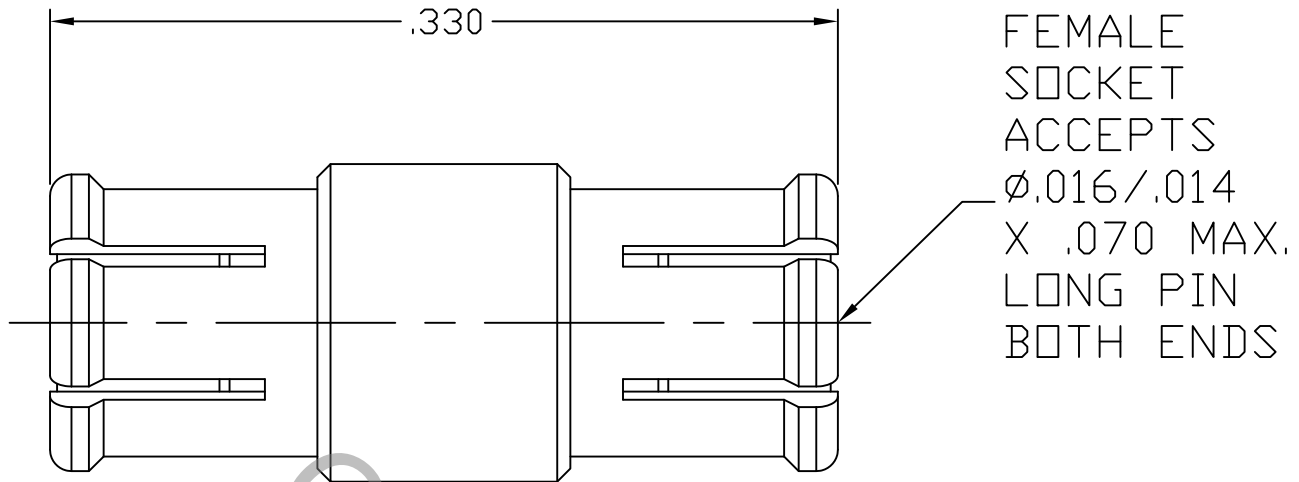


# SPECIFICATION CONTROL DRAWING




**1. MATING INTERFACE DIMENSIONS** Per MIL-STD-348 FIG. 326.1 (SMP FEMALE)

**2. ELECTRICAL**

FREQUENCY RANGE (DC TO 23.0 GHz.) *	VSWR 1.10:1 MAX.
FREQUENCY RANGE (23.0 TO 26.5 GHz.) *	VSWR 1.15:1 MAX.
FREQUENCY RANGE (26.5 TO 40.0 GHz.) *	VSWR 1.40:1 MAX.
INSERTION LOSS (dB MAX.)	.10 dB x $\sqrt{FGHz}$ .
NOMINAL IMPEDANCE (OHMS)	50
VOLTAGE RATING (MAX. VRMS) (OVER FREQ. RANGE)	170 @ SEA LEVEL 45 @ 70,000 FEET
RF LEAKAGE (MIN. dB DOWN)	-80 dB (3 GHz. MAX.) -65 dB (26.5 GHz. MAX.)
TEMPERATURE RATING (DEGREES CENTIGRADE)	-65° c TO + 165° c
DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS)	500 @ SEA LEVEL 125 @ 70,000 FEET
INSULATION RESISTANCE (MIN. MEGOHMS)	5,000
CONTACT RESISTANCE	
• CENTER CONTACT (MAX. MILLIOHMS)	6.0
• OUTER CONTACT (MAX. MILLIOHMS)	2.0

**RoHS**  
COMPLIANT

REV.	DCN NO.	DATE	APP.	DIMENSIONS ARE IN INCHES TOLERANCES	 HAVERHILL, MA 01835
AA	13-1685	5/7/13	TS	DECIMALS: .X ± .030 .XX ± .010 .XXX ± .005 FRACTIONAL: ± 1/64 ANGULAR: X° ± 1° 0' X° X' ± 15' SURFACE ROUGHNESS 63 √ MIL-STD 10.	TITLE <b>SMP FEMALE TO SMP FEMALE ADAPTER</b>
				DRAWN: TS      DATE: 5/7/13 APPROVED: DC      DATE: 5/7/13	
				CODE IDENT. 2J899      SHEET 1 OF 2	
					DWG. NO. <b>1100-2020-5417</b>

# SPECIFICATION CONTROL DRAWING

## 3. MECHANICAL

### CAPTIVATION-CENTER CONTACT

- MIN. AXIAL FORCE \_\_\_\_\_ 1.5 LBS.
- MIN. RADIAL TORQUE \_\_\_\_\_ N/A

RADIAL MISALIGNMENT \_\_\_\_\_ .010 MIN.  
AXIAL MISALIGNMENT \_\_\_\_\_ .000/.010

### CONNECTOR DURABILITY (MIN. MATING)

- A.) FULL DETENT \_\_\_\_\_ 100
- B.) LIMITED DETENT \_\_\_\_\_ 500
- C.) SMOOTH BORE \_\_\_\_\_ 1000

### FORCES TO ENGAGE AND DISENGAGE

#### ENGAGE

- A.) FULL DETENT SHROUD \_\_\_\_\_ 15.0 LBS. MAX.
- B.) LIMITED DETENT SHROUD \_\_\_\_\_ 10.0 LBS. MAX.
- C.) SMOOTH BORE SHROUD \_\_\_\_\_ 2.0 LBS. MAX.

#### DISENGAGE

- A.) FULL DETENT SHROUD \_\_\_\_\_ 5.0 LBS. MIN.
- B.) LIMITED DETENT SHROUD \_\_\_\_\_ 2.0 LBS. MIN.
- C.) SMOOTH BORE SHROUD \_\_\_\_\_ 0.5 LBS. MIN.

## 4. ENVIRONMENTAL

THERMAL SHOCK \_\_\_\_\_ MIL-STD-202, METHOD 107, COND. B ( HIGH TEMP. +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,  
1000 MEGOHMS MINIMUM WITHIN 5 MINUTES.  
CORONA (70,000 FEET) \_\_\_\_\_ 190 VRMS  
RF HIGH POTENTIAL MIN. VOLTS \_\_\_\_\_ 325 VRMS @ SEA LEVEL, FREQ. 5 MHz.  
VIBRATION, RANDOM \_\_\_\_\_ MIL-STD 202, METHOD 214, TEST CONDITION F

## 5. MATERIAL

CONNECTOR BODY AND CENTER CONTACT \_\_\_\_\_ BERYLLIUM COPPER PER ASTM B196/B, 196M-03, COPPER  
ALLOY No. UNS C17300, TEMPER TD04.  
INSULATOR \_\_\_\_\_ TEFLON PER ASTM D 1710-02, TYPE 1, GRADE 1, CLASS B.

## 6. FINISH

CONNECTOR BODY AND CENTER CONTACT \_\_\_\_\_ GOLD PER ASTM-B-488, TYPE I, CODE C, CLASS 1.25  
(.000050 MIN. THK.) OVER NICKEL PER QQ-N-290  
(.000100 MIN. THK.) OVER COPPER PER MIL-C-14550  
(.000040 MIN. THK.)  
INSULATOR \_\_\_\_\_ N/A