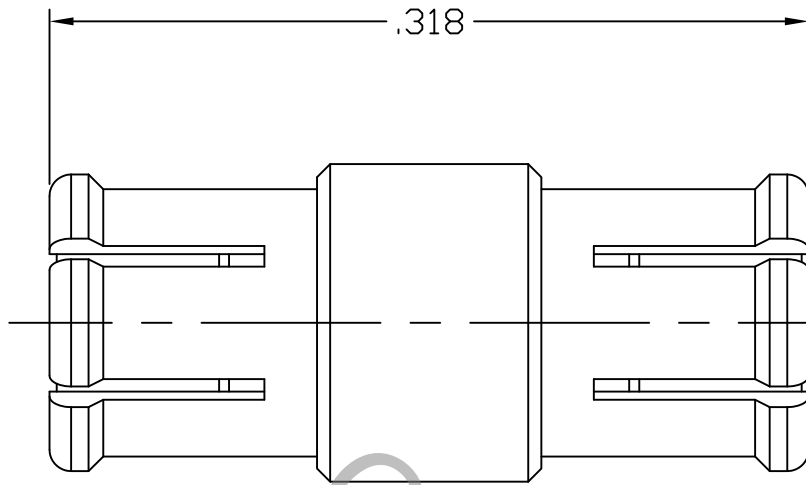


SPECIFICATION CONTROL DRAWING



FEMALE
SOCKET
ACCEPTS
Ø.016/.014
X .070 MAX.
LONG PIN
BOTH ENDS


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)	170 @ SEA LEVEL
(OVER FREQ. RANGE)	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

This Document contains proprietary and confidential information. COMPLIANT

REV.	DCN NO.	DATE	APP.	DIMENSIONS ARE IN INCHES TOLERANCES			 HAVERHILL, MA 01835
AA	14-2401	11/4/14	TS	DECIMALS .X ± .030 .XX ± .010 .XXX ± .005	FRACTIONAL ± 1/64	ANGULAR X° ± 1° 0' X° X' ± 15'	
				SURFACE ROUGHNESS 63 √ MIL-STD 10.			
				DRAWN	TS	DATE	11/4/14
				APPROVED	DC	DATE	11/4/14
				CODE IDENT.			DWG. NO. 1100-2020-5424
				2J899	SHEET 1 OF 2		
				TITLE			SMP FEMALE TO SMP FEMALE ADAPTER

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 SAE AMS QQ-N-290, CLASS 1
(.000100 MIN. THK.) OVER COPPER PER AMS 2418 (.000040 MIN. THK.)
INSULATOR _____ N/A

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 SAE AMS QQ-N-290, CLASS 1
(.000100 MIN. THK.) OVER COPPER PER AMS 2418 (.000040 MIN. THK.)
INSULATOR _____ N/A