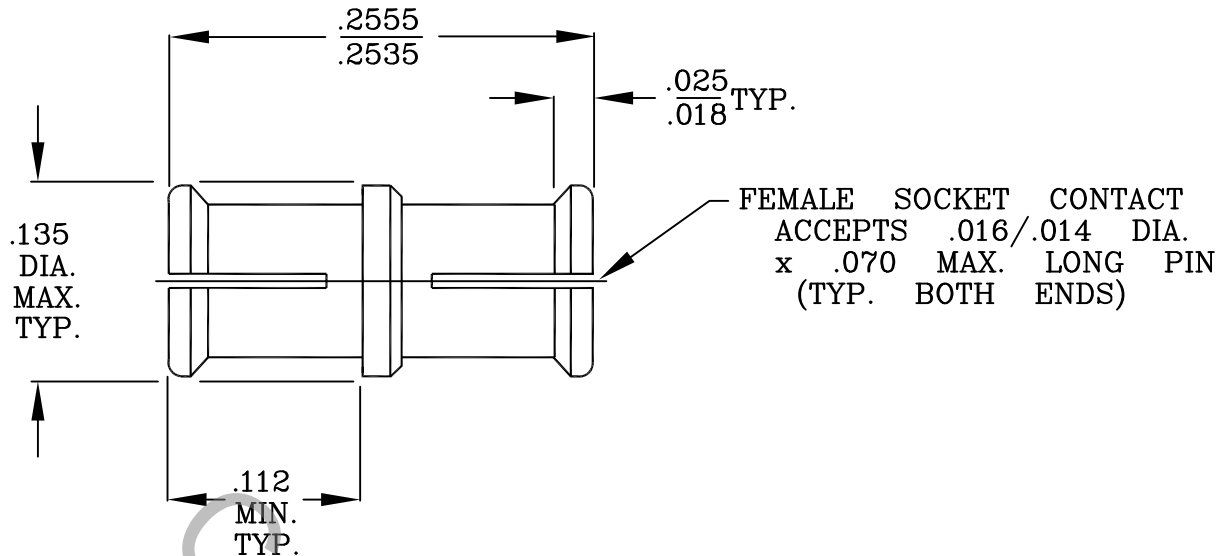


# SPECIFICATION CONTROL DRAWING



1. MATING INTERFACE DIMENSIONS PER MIL-STD 348, Fig. 326-1(SMP SERIES) AND DYNWAVE SPECIFICATION MD-20.

## 2. ELECTRICAL

FREQUENCY RANGE (DC TO 23.0 GHz.) *	_____	VSWR 1.10 MAX.
FREQUENCY RANGE (23.0 TO 26.5 GHz.) *	_____	VSWR 1.15 MAX.
FREQUENCY RANGE (26.5 TO 40.0 GHz.) *	_____	VSWR 1.40 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**  
COMPLIANT

REV.	DCN NO.	DATE	APP.	DIMENSIONS ARE IN INCHES TOLERANCES			 INCORPORATED HAVERHILL, MA 01835
				DECIMALS	FRACTIONAL	ANGULAR	
GA	97-0353	5/12/97	T.S.	.X ± .030 .XX ± .010 .XXX ± .005	1/64	X° ± 1' 0" X° X' ± 15'	
GB	97-0411	6/24/97	DGG	SURFACE ROUGHNESS 63 √ MIL-STD 10.			
GC	98-0407	5/28/98	DGG	DRAWN	T.S.	DATE 10/91	TITLE SMP, FEMALE INTERCONNECT ADAPTER JACK TO JACK
GD	98-0702	7/23/98	DGG	APPROVED D.G.G. DATE 10/91			
GE	02-0202	3/20/02	DGG				
GF	03-1062	1/16/03	DGG	CODE IDENT.	SHEET 1 OF 2		DWG. NO. 1100-2020-5450
GG	11-1122	2/7/11	DC	2J899			

# 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-B-196/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 1, CODE C, CLASS 1.25  
(.000050 - .000100 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