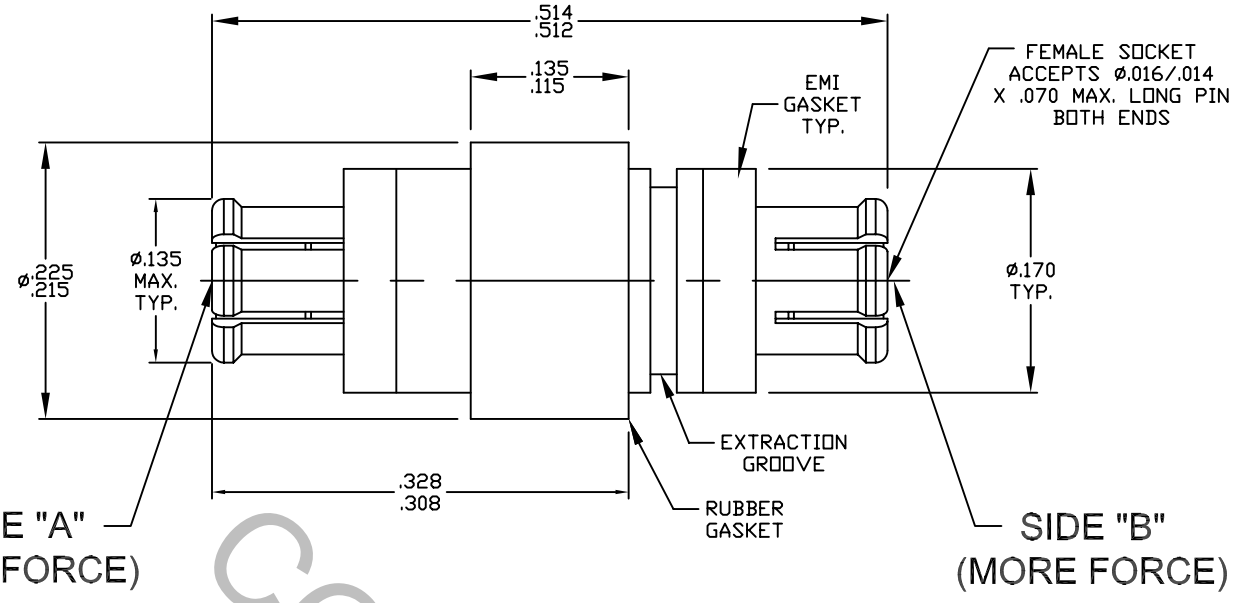
SPECIFICATION CONTROL DRAWING



CONFIDENTIAL

1. MATING

INTERFACE DIMENSIONS SIMILAR TO MIL-STD-348 FiG. 326.1 (SMP FEMALE)
(DISENGAGE VALUES HAVE BEEN OBTAINED BY CHANGING THE MECHANICAL DIMENSIONS)

2. ELECTRICAL

FREQUENCY RANGE (2.0 TO 4.0 GHz.)	VSWR 1.07:1 MAX.
VSWR DE-RATING FACTOR (OVERALL SPEC. REQM'T)	1.03 x RATED VSWR (1.07) = 1.10 MAX.
INSERTION LOSS (dB MAX.)	.10 dB x $\sqrt{FGHz.}$
NOMINAL IMPEDANCE (OHMS)	50
RF LEAKAGE (MIN. dB DOWN)	70 dB @ 4 GHz.
TEMPERATURE RATING (DEGREES CENTIGRADE)	-65° c TO + 125° c
DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS)	500 @ SEA LEVEL 125 @ 70,000 FEET
AVERAGE CW POWER @ 2.0 GHz.	270 WATTS @ +40° c
AVERAGE CW POWER @ 4.0 GHz.	190 WATTS @ +40° c
TEMPERTURE DE-RATING FACTOR	+85° c = 0.90 x RATED POWER +105° c = 0.70 x RATED POWER +125° c = 0.55 x RATED POWER
INSULATION RESISTANCE (MIN. MEGOHMS)	5,000
CONTACT RESISTANCE	
• CENTER CONTACT (MAX. MILLIOHMS)	6.0
• OUTER CONTACT (MAX. MILLIOHMS)	2.0

REV.	DCN NO.	DATE	APP.
AA	07-1718		

DIMENSIONS ARE IN INCHES
TOLERANCES

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

SURFACE ROUGHNESS 63 √ MIL-STD 10.

dynawave INCORPORATED
HAVERHILL, MA 01835

DRAWN TS DATE 7/18/07

APPROVED DC DATE 7/18/07

TITLE
MODIFIED SMP FEMALE TO MODIFIED SMP FEMALE ADAPTER

CODE IDENT. 2J899

SHEET 1 OF 2

DWG. NO. 1100-2020-5404

SPECIFICATION CONTROL DRAWING

3. MECHANICAL

CAPTIVATION–CENTER CONTACT

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

RADIAL MISALIGNMENT — .010 MAX.

AXIAL MISALIGNMENT — .000/.010

CONNECTOR DURABILITY (MIN. MATING)

A.) FULL DETENT SHROUD — 100

FORCE TO DISENGAGE
"SIDE "A" (LESS RETENSION FORCE)

A.) FULL DETENT SHROUD — 5.0 LBS. MAX.

FORCE TO DISENGAGE
"SIDE "B" (MORE RETENSION FORCE)

A.) FULL DETENT SHROUD — 8.0 LBS. MIN.

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4. ENVIRONMENTAL

THERMAL SHOCK	MIL–STD–202, METHOD 107, COND. B (HIGH TEMP. +125° 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.
RUBBER GASKET	SILICONE RUBBER PER ZZ–R–765
INSULATOR	TEFLON PER ASTM D 1710, TYPE 1, GRADE 1, CLASS B.
EMI GASKET	SILVER PLATED COPPER IN SILICONE.

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, RUBBER GASKET AND EMI GASKET	N/A