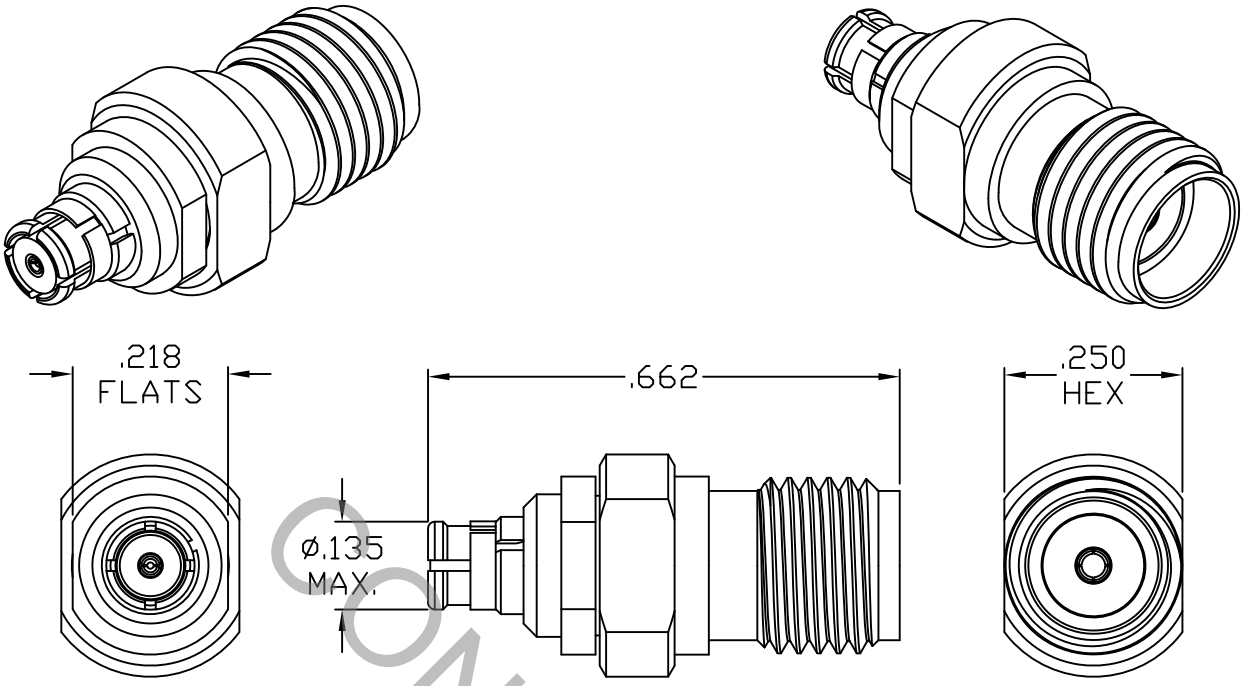
SPECIFICATION CONTROL DRAWING



1. MATING

INTERFACE DIMENSIONS Per MIL-STD-348 Fig. 310.2 (SMA JACK)
AND Per MIL-STD-348 Fig. 326.1A (SMP FEMALE)

2. ELECTRICAL

FREQUENCY RANGE GHz	DC TO 26.5 GHz
VSWR (MAX.) ❋	1.05 + .010 x FGHz
INSERTION LOSS (dB MAX.) ❋	.10 dB x $\sqrt{\text{FGHz}}$
NOMINAL IMPEDANCE (OHMS)	50
VOLTAGE RATING (MAX. VRMS)	190
RF LEAKAGE (MIN. dB DOWN)	−85 dB − FGHz
TEMPERATURE RATING (DEGREES CENTIGRADE)	−65°c TO + 165°c
DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS)	500
INSULATION RESISTANCE (MIN. MEGOHMS)	5,000
CONTACT RESISTANCE	
• CENTER CONTACT (MAX. MILLIOHMS)	3.0
• OUTER CONTACT (MAX. MILLIOHMS)	2.0

❋ TERMINATED IN A 50 OHM LOAD

RoHS
COMPLIANT

REV.	DCN NO.	DATE	APP.
AA	03-2076	8/26/03	DC
AB	10-1965	10/12/10	DC

DIMENSIONS ARE IN INCHES
TOLERANCES

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

dynawave INCORPORATED
HAVERHILL, MA 01835

DRAWN BN DATE 8/25/03

APPROVED DC DATE 8/26/03

TITLE
SMP FEMALE TO
SMA JACK ADAPTER

CODE IDENT. 2J899

SHEET 1 OF 2

DWG. NO. 1100-2099-5425

SPECIFICATION CONTROL DRAWING

3. MECHANICAL

CAPTIVATION–CENTER CONTACT	
MAX. AXIAL FORCE	4.0 LBS.
MAX. RADIAL TORQUE	N/A
CENTER CONTACT AXIAL FORCES	
● INSERTION (MAX. OUNCES)	INTERFACE 32.0
● WITHDRAWAL (MIN. OUNCES)	INTERFACE 2.0
CONNECTOR ENGAGEMENT/DISENGAGEMENT (MAX. LBS.)	SMA, 2.0
SMP FULL DETENT (LBS.)	15.0 MAX. / 5.0 MIN.
SMP LIMITED DETENT (LBS)	10.0 MAX. / 2.0 MIN.
SMP SMOOTH BORE (LBS)	2.0 MAX. / 0.5 MIN.
CONNECTOR DURABILITY (MIN. CYCLES)	100
RECOMMENDED MATING TORQUE	SMA 7 – 10 IN. LBS., SMP N/A

4. ENVIRONMENTAL

THERMAL SHOCK	MIL–STD–202, METHOD 107, COND. B (–65° c TO + 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
CORROSION	MIL–STD–202, METHOD 101, COND. B (48 HOURS)
BAROMETRIC PRESSURE (ALTITUDE)	MIL–STD–202, METHOD 105, COND. C (70,000 FT.) (125 VRMS)

5. MATERIAL

SMA BODY	STAINLESS STEEL PER ASTM–A–582, TYPE 303, COND. A
SMP BODY, CONTACT, EMI RING & ANTI–ROCK RING	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

SMA BODY	GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 0.70 (.000030 MIN. THK.) OVER NICKEL PER SAE–AMS–QQ–N–290 CLASS 1 (.000050 MIN. THK.) OVER NICKEL (WOODS OR WATTS), (.000010 MIN. THK.).
SMP BODY, EMI RING & ANTI–ROCK RING	GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 0.70 (.000030 MIN. THK.) OVER NICKEL PER SAE–AMS–QQ–N–290 CLASS 1 (.000050 MIN. THK.) OVER COPPER PER AMS–2418, (.000010 MIN. THK.).
CONTACT	GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 2.5 (.00010 MIN. THK.) OVER NICKEL PER SAE–AMS–QQ–N–290 CLASS 1 (.000050 MIN. THK.) OVER COPPER PER AMS–2418 (.000010 MIN. THK.)
INSULATOR	N/A