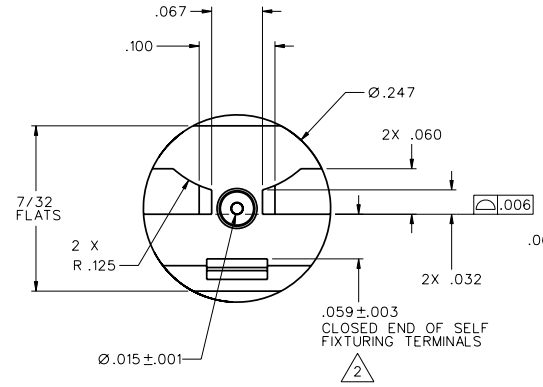
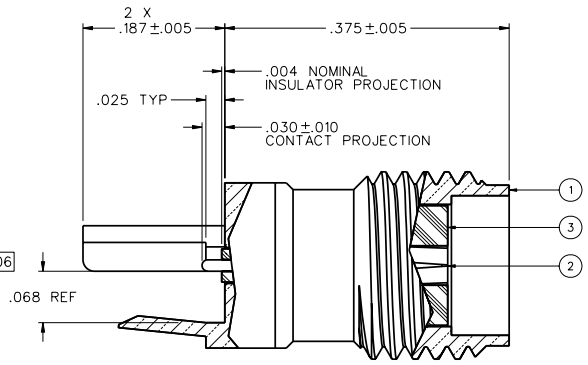
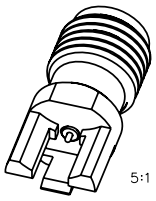
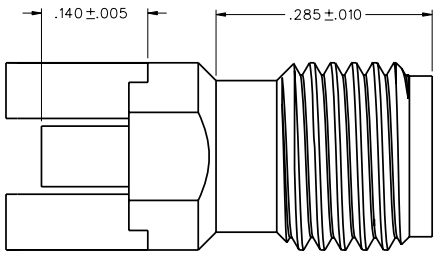
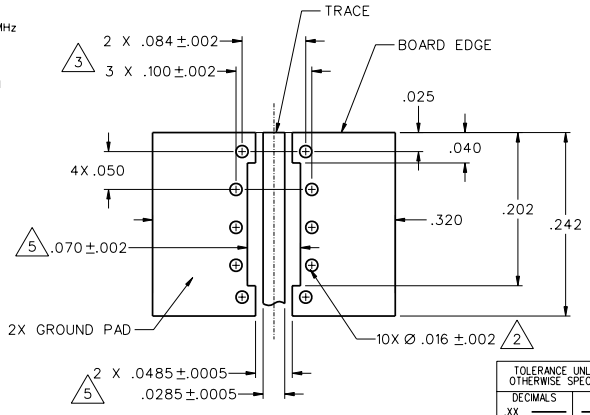
PART NUMBER	ITEM (1) BODY	ITEM (2) CONTACT	ITEM (3) INSULATOR
142-1701-821	BRASS GOLD PL .00001 MIN OVER NICKEL PL .0001 MIN OVER COPPER PL .00005 MIN	BERYLLIUM COPPER GOLD PL .00005 MIN OVER NICKEL PL .00005 MIN OVER COPPER PL .00005 MIN	TEFLON











TRACE LAYOUT
10:1 (TOP VIEW)

NOTES:

1. SPECIFICATIONS:

   IMPEDANCE: 50 OHMS
   FREQUENCY RANGE: 0-26.5 GHz
   VSWR: 1.05+.02F(GHz) MAX AT 0-18 GHz, TYPICALLY < 1.50 AT 18-26.5 GHz
   WORKING VOLTAGE: 170 VRMS MAX AT SEA LEVEL
   DIELECTRIC WITHSTANDING VOLTAGE: 500 VRMS MIN AT SEA LEVEL
   INSULATION RESISTANCE: 1000 MEGOHM MIN
   CONTACT RESISTANCE:
   CENTER CONTACT - INITIAL 3.0 MILLIOHM MAX, AFTER ENVIRONMENTAL 4.0 MILLIOHM MAX
   OUTER CONDUCTOR - INITIAL 2.0 MILLIOHM MAX AFTER ENVIRONMENTAL NOT APPLICABLE
   CORONA LEVEL: 125 VOLTS MIN AT 70,000 FEET
   INSERTION LOSS: NOT APPLICABLE (DEPENDANT UPON APPLICATION)
   RF LEAKAGE: NOT APPLICABLE
   RF HIGH POTENTIAL WITHSTANDING VOLTAGE: 335 VRMS MIN AT 4 AND 7 MHz

   MECHANICAL:

   ENGAGE/DISENGAGE TORQUE: 2 INCH-POUNDS MAX
   MATING TORQUE: 7-10 INCH POUNDS WHEN BODY SUPPORTED WITH WRENCH
   CONTACT RETENTION: 6 LBS MIN AXIAL FORCE ON MATING END
   4 IN-OZ MIN RADIAL TORQUE
   DURABILITY: 500 CYCLES MIN

   ENVIRONMENTAL:

   (MEETS OR EXCEEDS THE APPLICABLE PARAGRAPH OF MIL-PRF-39012)
   THERMAL SHOCK: MIL-STD-202, METHOD 107, CONDITION B, EXCEPT 115°C HIGH TEMP
   OPERATING TEMPERATURE: -65 DEG C TO 165 DEG C
   CORROSION: MIL-STD-202, METHOD 101, CONDITION B
   SHOCK: MIL-STD-202, METHOD 213, CONDITION I
   VIBRATION: MIL-STD-202, METHOD 204, CONDITION D
   MOISTURE RESISTANCE: MIL-STD-202, METHOD 106

2. ALL HOLES PLATED THRU ENTIRE CIRCUIT BOARD STACKUP.

3. HOLE PATTERNS SYMMETRICAL ABOUT CENTER OF CPW TRACE.

4. FOR OPTIMUM CIRCUIT BOARD HIGH FREQUENCY PERFORMANCE:
   A. MAINTAIN SOLID GROUND PLANE BELOW HIGH FREQ SUBSTRATE.
   B. CONTROL PULLBACK OF TRACE AND GROUND FROM BOARD EDGE.
   C. CONTINUE GROUNDED COPLANAR LINE BEYOND GROUND PADS.
   D. PLACE 16 MIL DIA GROUND VIAS ON BOTH SIDES OF COPLANAR WAVEGUIDE LINE AT 50 MIL INTERVALS ALONG ENTIRE LENGTH.
   E. IMMERSION GOLD PLATE (ENIG) ALL CONDUCTORS PER IPC-4552.

5. REFERENCE DIMENSIONS FOR 50 OHM GROUNDED CPW LINE, USING ROGERS RO4003, 16 MIL HIGH FREQUENCY CIRCUIT BOARD SUBSTRATE:
   TRACE WIDTH = 28.5 MILS
   GROUND GAPS = 10 MILS
   CONDUCTOR THICKNESS = 1.4 MIL (INCLUDES PLATING)

6. EMERSON NETWORK POWER CONNECTIVITY SOLUTIONS HIGH FREQUENCY END LAUNCH CONNECTORS AND SELF FIXTURE END LAUNCH CONNECTORS ARE COVERED UNDER US PATENT NUMBER 7,344,381 AND 7,500,855.

DRAWING NO.
C - 142-1701-821/830

0 REVISIONS

CUSTOMER DRAWING

THIS DRAWING TO BE INTERPRETED PER ASME Y 14.5M - 1994

"μSTATION"

COMPANY CONFIDENTIAL

TOLERANCE UNLESS OTHERWISE SPECIFIED		DRAWN BY	DATE
DECIMALS	mm	T.A.Kari	9-13-09
.XX		CHECKED BY	DATE
.XXX ±.003			
MATL		APPROVED BY	DATE
		X	X
FINISH		RELEASE DATE	X
		U/M INCH	SCALE 10:1

EMERSON. Network Power
Connectivity Solutions
P.O. Box 1732
Waseca, MN 56093
1-800-247-8256

TITLE
SMA JACK END LAUNCH, SELF FIXTURE, HIGH FREQUENCY .015 PIN, .016 CIRCUIT DIELECTRIC

SHEET 2 OF 2

DRAWING NO.
C - 142-1701-821/830

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