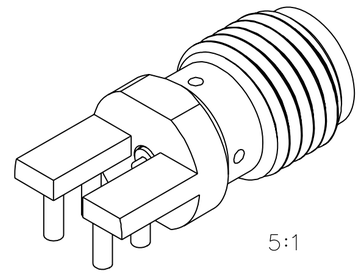
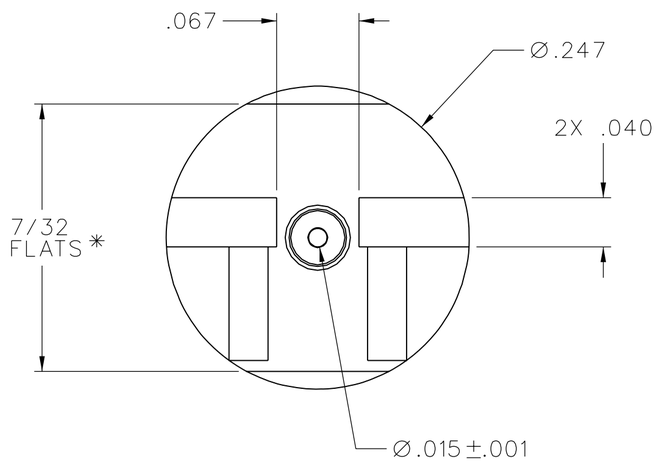
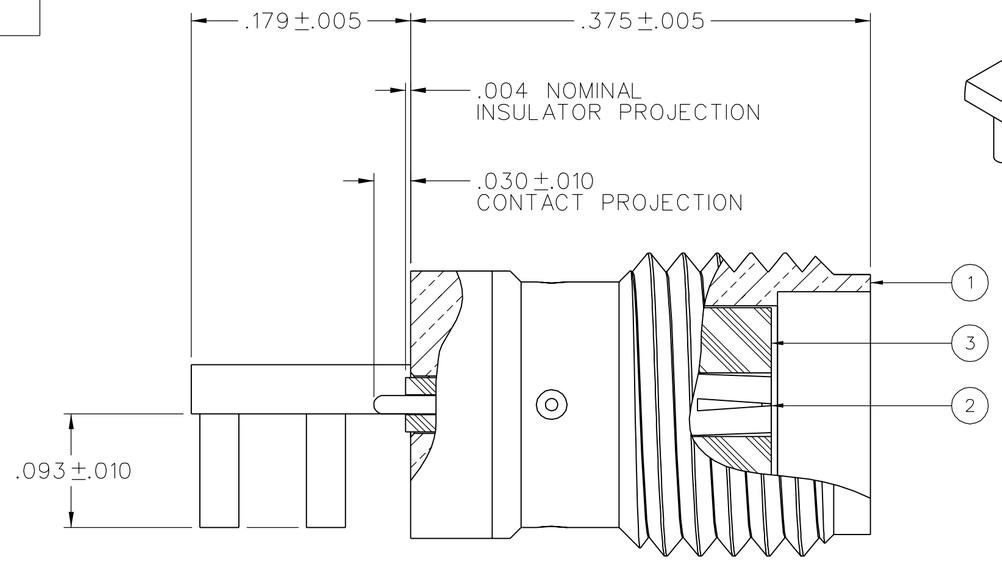
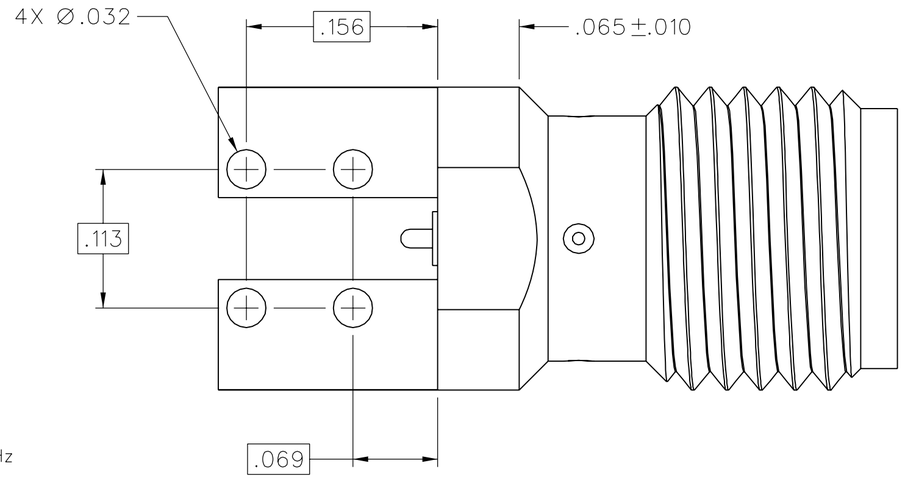
PART NUMBER	ITEM (1) BODY	ITEM (2) CONTACT	ITEM (3) INSULATOR
142-0761-821	BRASS GOLD PL .00001 MIN OVER NICKEL PL .0001 MIN OVER COPPER PL .00005 MIN	BERYLLIUM COPPER GOLD PL .00005 MIN OVER NICKEL PL .00005 MIN OVER COPPER PL .00005 MIN	TEFLON









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
*8 INCH POUNDS MAX UNSUPPORTED
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

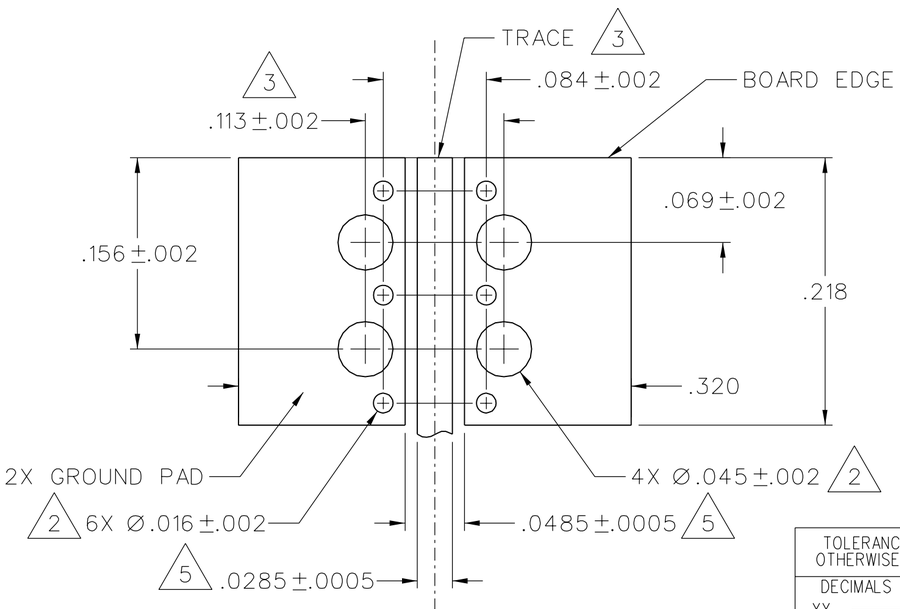
2. ALL HOLES PLATED THRU ENTIRE CIRCUIT BOARD STACKUP.

3. HOLE PATTERNS SYMMETRICAL ABOUT CENTER OF CPW TRACE.

4. FOR OPTIMUM CIRCUIT BOARD HIGH FREQUENCY PERFORMANCE:
   A. MAINTAIN SOLID GROUND PLANE BELOW HF 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 ARE COVERED UNDER U.S. PATENT NUMBER 7,344,381.



MOUNTING FOOTPRINT
10:1 (TOP VIEW, INCLUDING TRACE DIMENSIONS)

DRAWING NO. C-142-0761-821/830

0	REVISIONS							
ENGINEERING RELEASE								
1	11-5-04	JRK					12-15-04	ECN 49542
ADDED NOTE: 6								
* REVISION NUMBER FOLLOWED BY AN ALPHA CHARACTER INDICATES DRAWING CLARIFICATION OR PART NUMBER ADDITION ONLY.								
1a	4-14-08	PAT	JRK	MJU	BLF		5-7-08	ECN 51477

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	JRK	11-1-04
.XX ———	———	CHECKED BY	DATE
.XXX ±.003	———		
MATL ———		APPROVED BY JRK	DATE 12-15-04
FINISH ———		RELEASE DATE	2-15-04
		U/M INCH	SCALE 10:1

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

TITLE
HIGH FREQ END LAUNCH SMA JACK ASSEMBLY, PC MOUNT, 15 MIL PIN

SHEET 2 OF 2

DRAWING NO. C-142-0761-821/830