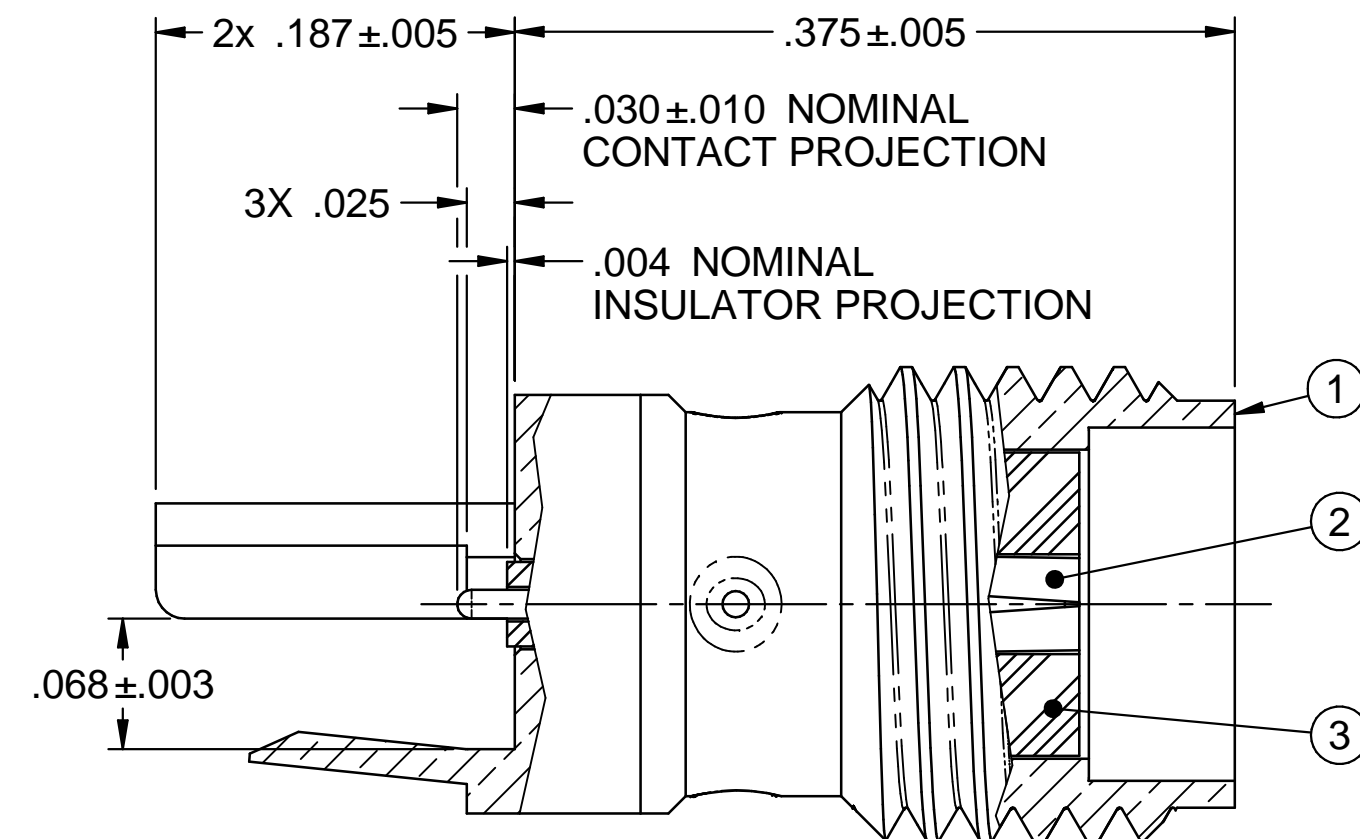
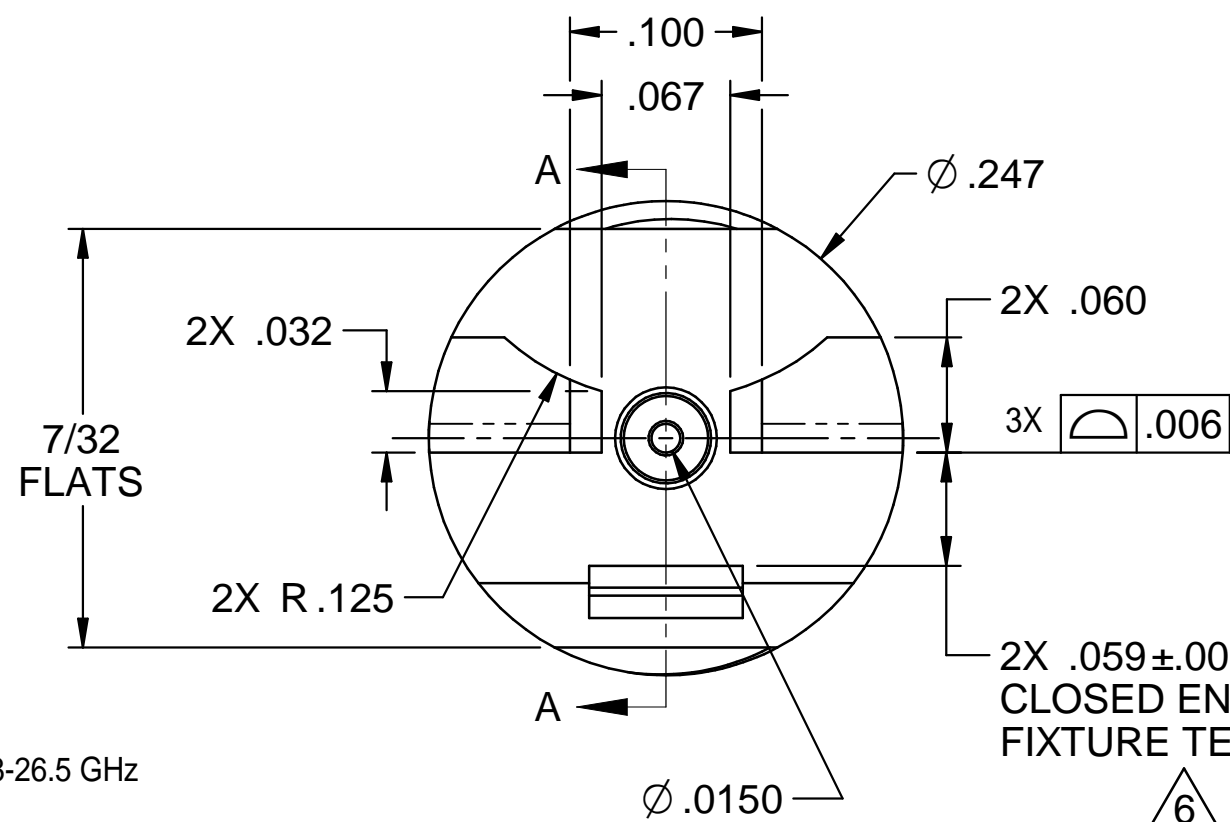


PART NUMBER	ITEM 1 BODY	ITEM 2 CONTACT	ITEM 3 INSULATOR
142-1701-821	BRASS GOLD PL .00001 MIN OVER NICKEL PL .00005 MIN OVER COPPER PL .00005 MIN	BERYLLIUM COPPER GOLD PL .00005 MIN OVER NICKEL PL .00005 MIN OVER COPPER PL .00005 MIN	TEFLON

ZONE	REV	ECO	DESCRIPTION	APPR.	DATE
	1	53056		TAK	10/13/09
	1A	53965		TAK	1/16/12



NOTES: UNLESS OTHERWISE SPECIFIED.

1. SPECIFICATIONS:

ELECTRICAL:

- 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 SEAL LEVEL
- INSULATION RESISTANCE: 1000 MEGOHMS
- CONTACT RESISTANCE: CENTER CONTACT - INITIAL 3.0 MILLIOHMS MAX, AFTER ENVIRONMENTAL - 4.0 MILLIOHMS MAX
- OUTER CONDUCTOR - INITIAL 2.0 MILLIOHMS MAX, AFTER ENVIRONMENTAL - N/A
- CORONA LEVEL: 125 VOLTS MIN AT 70,000 FEET
- INSERTION LOSS: N/A (DEPENDANT UPON APPLICATION)
- RF HIGH POTENTIAL WITHSTANDING VOLTAGE: 335 VRMS MIN AT 4 AND 7 MHz

MECHANICAL:

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

ENVIRONMENTAL:

- (MEETS OR EXCEEDS THE APPLICABLE PARAGRAPH OF MIL-PRF-39012)
- THERMAL SHOCK: MIL-STS-202, METHOD 107, CONDITION B EXCEPT 115°C HIGH TEMP
- OPERATING TEMPERATURE: -65°C TO 165°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.

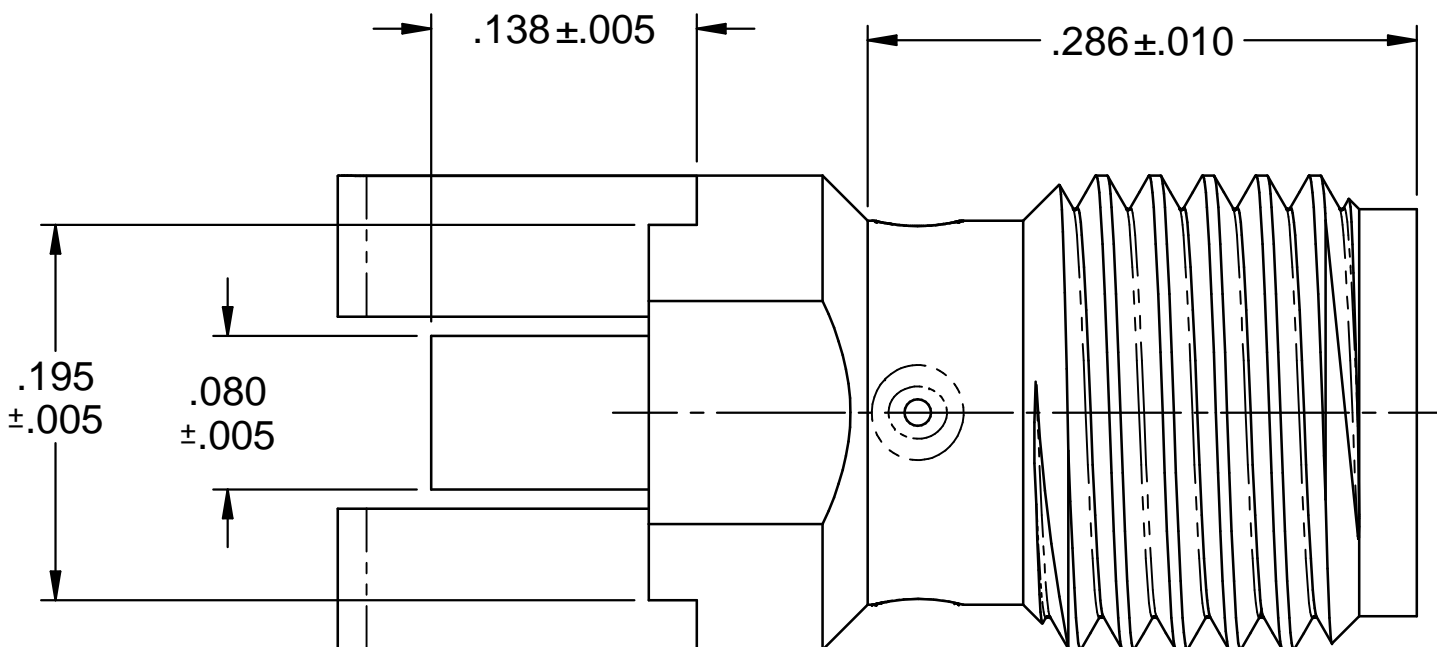
4. FOR OPTIMUM CIRCUIT BOARD HIGH FREQUENCY PERFORMANCE:
- A. MAINTAIN SOLID GROUND PLANE BELOW HIGH FREQUENCY SUBSTRATE.
  - B. CONTROL PULLBACK OF TRACE AND GROUND FROM BOARD EDGE.
  - C. CONTINUE GROUNDED COPLANAR LINE BEYOND GROUND PADS.
  - D. PLACE 16 MIL DIA GROUND VIAS ON BOTH SIDES OF COPLANAR 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 R04003, 16 MIL HIGH FREQUENCY CIRCUIT BOARD SUBSTRATE:

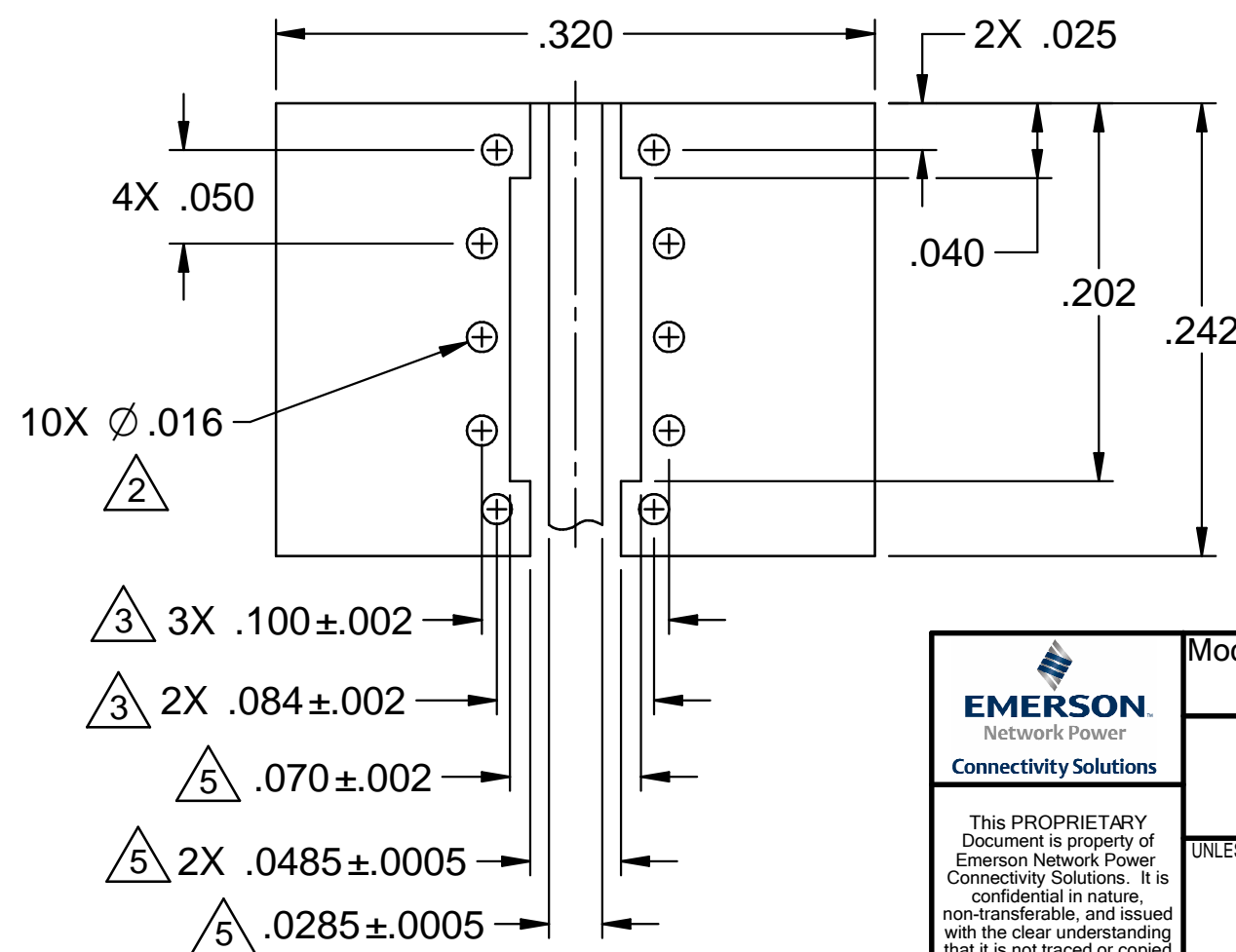
- TRACE WIDTH - 28.5 MILS
- GROUND GAPS - 10 MILS
- CONDUCTOR THICKNESS - 1.4 MIL (INCLUDES PLATING)

6. ALL TERMINALS SHALL BE SOLDERED TO CIRCUIT BOARD.

2X .059±.003  
CLOSED END OF SELF  
FIXTURE TERMINALS



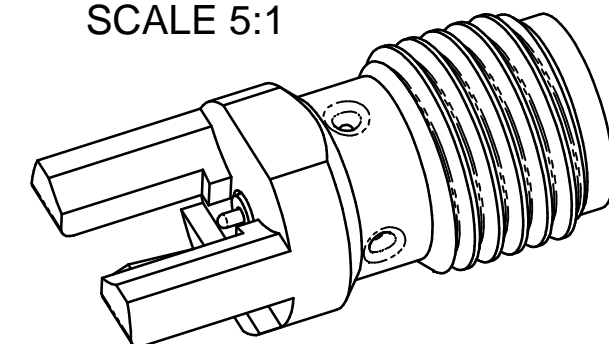
TRACE LAYOUT  
(TOP VIEW)  
SCALE 10:1



TYPICAL MICROSTRIP TOPSIDE LAYOUT

.062" THICK BOARD  
FR4 BOARD  
DOUBLE SIDED 1 OZ COPPER  
FULL UNDERSIDE GROUND PLANE  
ALL DIMENSIONS ARE REFERENCE  
APPLICATIONS REQUIRE OPTIMIZATION

SCALE 5:1



	Model No. <b>142-1701-821/830</b>		<b>JOHNSON</b>	
	Cage Code <b>34078</b>		Title <b>SMA JACK SELF FIXTURE END LAUNCH</b>	
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	UNLESS OTHERWISE SPECIFIED UNITS: INCHES .XX ±.01 .XXX ±.003 .XXXX ±.0010 ANGLES ±1°00'	Drawn by <b>TAK</b>	Date <b>9/13/09</b>	Rev. <b>1A</b>
Approved by <b>TAK</b>		Date <b>10/13/09</b>	Size <b>C</b>	DO NOT SCALE DRAWING
			Scale 10:1	Sheet 1 of 2

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