

NOTES: UNLESS OTHERWISE SPECIFIED.

1. MATERIAL AND FINISH:

- 1.1 BODY & COUPLING NUT: GOLD PLATED BRASS
- 1.2 CONTACT: GOLD PLATED BERYLLIUM COPPER
- 1.3 INSULATOR: PTFE (TEFLON)
- 1.4 COUPLING SPRING: BERYLLIUM COPPER UNPLATED

2. ELECTRICAL SPECIFICATIONS:

- 2.1 IMPEDANCE: 50 OHMS
- 2.2 FREQUENCY: 0 - 26.5 GHz
- 2.3 VSWR: 1.05+.02F(GHz) MAX AT 0-18 GHz, <1.50 TYPICAL AT 18-26.5 GHz
- 2.4 WORKING VOLTAGE: 170 VRMS MAX AT SEA LEVEL
- 2.5 DIELECTRIC WITHSTANDING VOLTAGE: 500 VRMS MIN AT SEA LEVEL
- 2.6 INSULATION RESISTANCE: 1000 MEGOHMS MIN
- 2.7 CONTACT RESISTANCE:
  - CENTER CONTACT: INTIAL 3.0 MILLIOHM MAX, AFTER ENVIRONMENTAL 4.0 MILLIOHM MAX
  - OUTER CONDUCTOR: INITIAL 2.0 MILLIOHM MAX, AFTER ENVIRONMENTAL - N/A
- 2.8 CORONA LEVEL: 125 VOLTS MIN AT 70,000 FEET
- 2.9 RF HIGH POTENTIAL WITHSTANDING VOLTAGE: 335 VRMS AT 4 & 7 MHz

3. MECHANICAL SPECIFICATIONS:

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

4. ENVIRONMENTAL:

(MEETS OR EXCEEDS THE APPLICABLE PARAGRAPH OF MIL-PRF-39012)

- 4.1 THERMAL SHOCK: MIL-STD-202, METHOD 107, CONDITION B, EXCEPT 115°C HIGH TEMP
- 4.2 OPERATING TEMPERATURE: -65°C TO 165°C
- 4.3 CORROSION: MIL-STD-202, METHOD 101, CONDITION B
- 4.4 SHOCK: MIL-STD-202, METHOD 213, CONDITION I
- 4.5 VIBRATION: MIL-STD-202, METHOD 204, CONDITION D
- 4.6 MOISTURE RESISTANCE: MIL-STD-202, METHOD 106

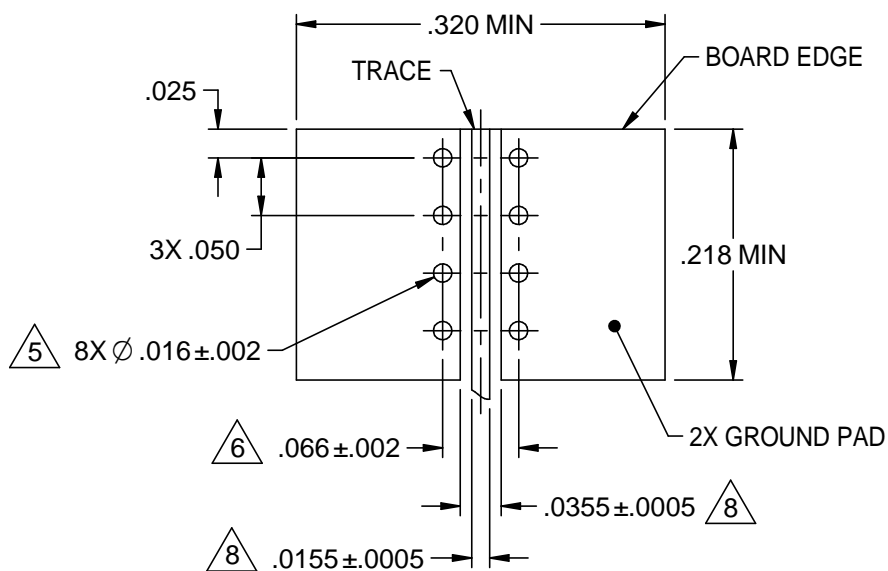
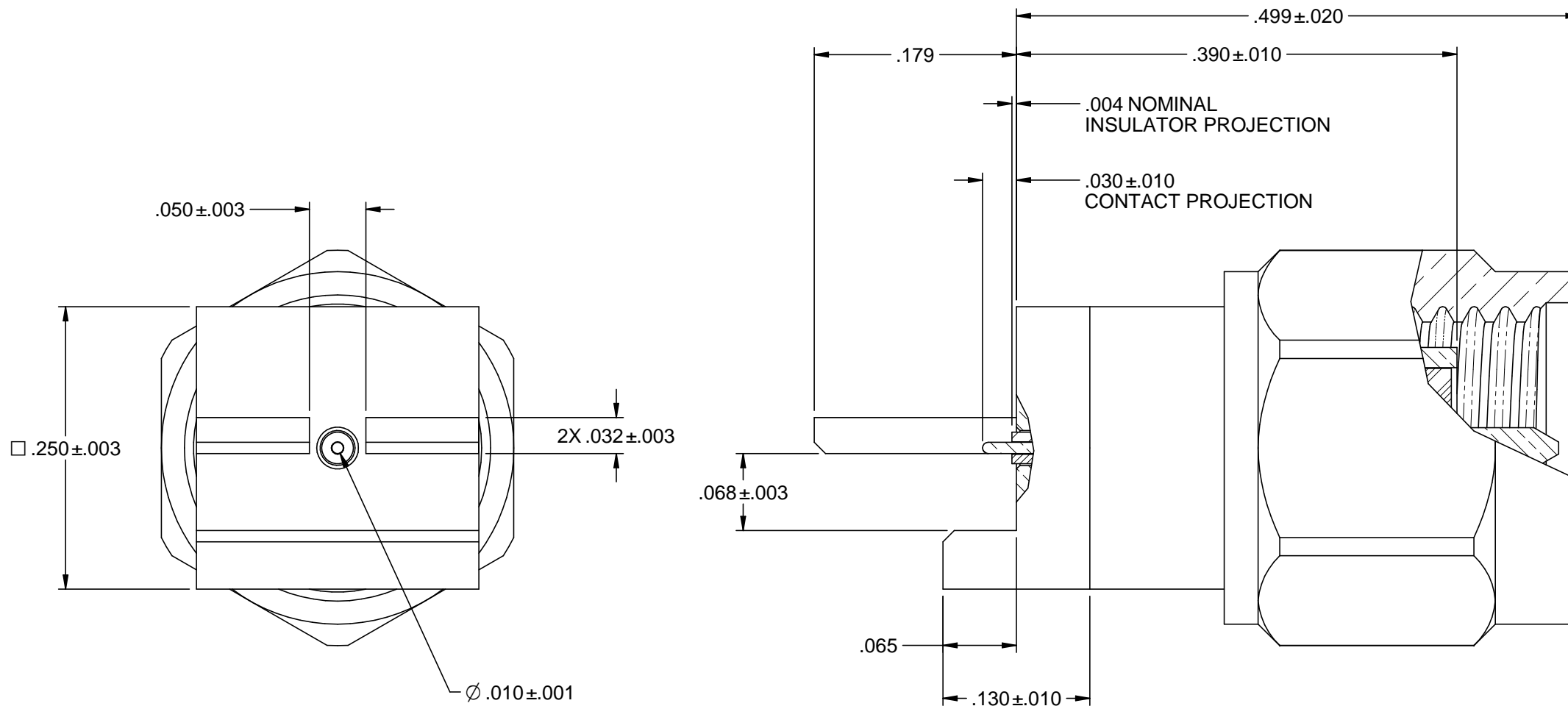
5. ALL HOLES PLATED THRU ENTIRE CIRCUIT BOARD STACKUP.

6. HOLE PATTERNS SYMMETRICAL ABOUT CENTER CPW TRACE.

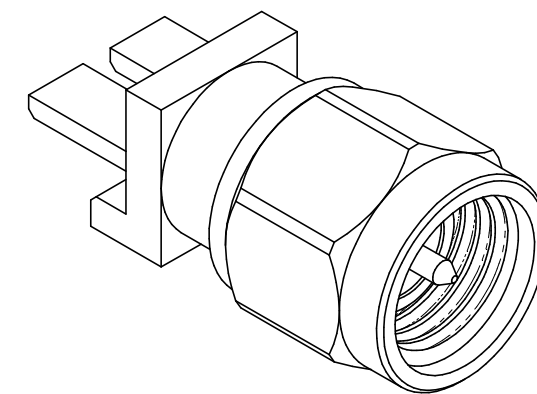
7. FOR OPTIMUM CIRCUIT BOARD HIGH FREQUENCY PERFORMANCE:

- 7.1 MAINTAIN SOLID GROUND PLANE BELOW HF SUBSTRATE.
- 7.2 CONTROL PULLBACK OF TRACE AND GROUND FROM BOARD EDGE.
- 7.3 CONTINUE GROUNDED COPLANAR LINE BEYOND GROUND PADS.
- 7.4 PLACE 16 MIL DIA GROUND VIAS ON BOTH SIDE OF COPLANAR WAVEGUIDE LINE AT 50 MIL INTERVALS ALONG ENTIRE LENGTH.
- 7.5 IMMERSION GOLD PLATE (ENIG) ALL CONDUCTORS PER IPC-4552.

8. REFERENCE DIMENSIONS FOR 50 OHM GROUNDED CPW LINE, USING ROGERS R04003, 8 MIL HIGH FREQUENCY CIRCUIT BOARD SUBSTRATE:  
TRACE WIDTH: 15.5 MILS  
GROUND GAPS: 10 MILS  
CONDUCTOR THICKNESS: 1.4 MIL (INCLUDES PLATING)



MOUNTING FOOTPRINT  
(TOP VIEW, INCLUDING TRACE DIMENSIONS)



	3RD ANGLE PROJECTION 	<b>JOHNSON</b>
	RoHS2 2011/65/EU	Title: PLUG ASSEMBLY, HIGH FREQ END LAUNCH, SMA, .010 MIL PIN
UNLESS OTHERWISE SPECIFIED UNITS: INCH .XX ±.02 .XXX ±.005 ANGLES ±2°	Model No. 142-0861-851	Size B
INTERPRET DRAWING IN ACCORDANCE WITH ASME Y14.5-2009	DO NOT SCALE DRAWING	Date: 11/3/2014 Sheet 1 of 1

# Mouser Electronics

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