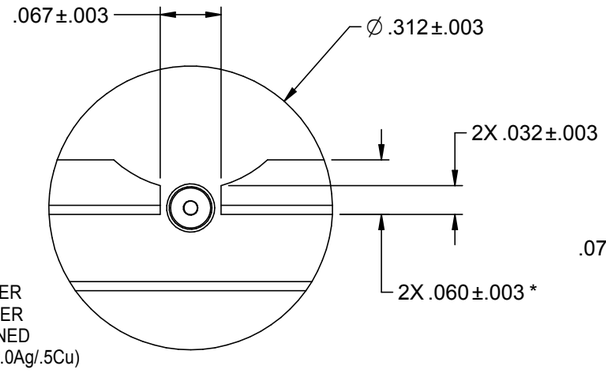
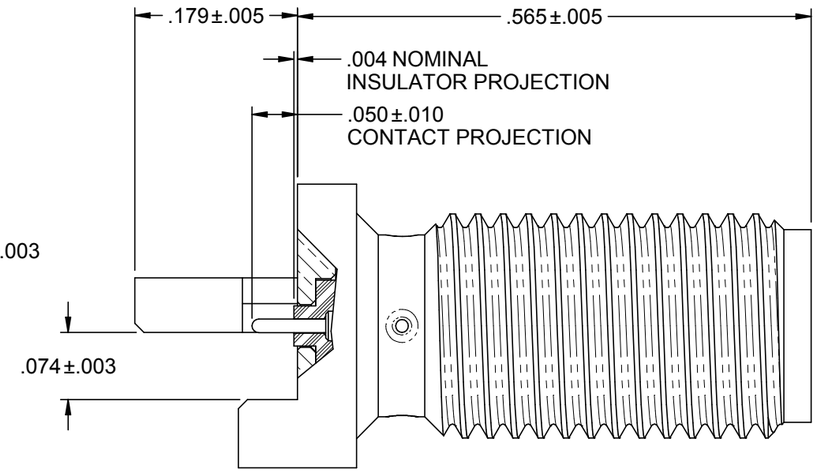
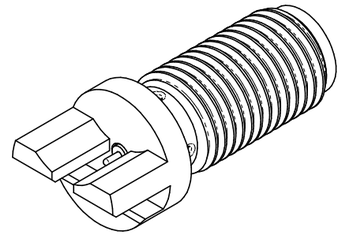






NOTES: UNLESS OTHERWISE SPECIFIED.

1. MATERIALS AND PLATING:
   - 1.1 BODY: (142-0781-821) GOLD PLATED BRASS
     (142-0781-822) GOLD PLATED BRASS
   - 1.2 INSULATOR: (142-0781-821) TEFLON
     (142-0781-822) TEFLON
   - 1.3 CENTER CONTACT: (142-0781-821) GOLD PLATED BERYLLIUM COPPER
     (142-0781-822) GOLD PLATED BERYLLIUM COPPER
     EXPOSED CENTER PIN PRE-TINNED
     WITH SAC 305 SOLDER (96.5Sn/3.0Ag/.5Cu)

2. ELECTRICAL SPECIFICATIONS:
   - 2.1 IMPEDANCE: 50 OHMS
   - 2.2 FREQUENCY RANGE: 0-26.5 GHz
   - 2.3 VSWR: 1.05+.02F(GHz) MAX AT 0-18 GHz, TYPICALLY < 1.50 AT 18-26.5 GHz
   - 2.4 WORKING VOLTAGE: 170 VRMS MAX AT SEA LEVEL
   - 2.5 DIELECTRIC WITHSTANDING VOLTAGE: 500 VRMS MIN AT SEAL LEVEL
   - 2.6 INSULATION RESISTANCE: 1000 MEGOHMS MIN
   - 2.7 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
   - 2.8 CORONA LEVEL: 125 VOLTS MIN AT 70,000 FEET
   - 2.9 INSERTION LOSS: N/A (DEPENDANT UPON APPLICATION)
   - 2.10 RF HIGH POTENTIAL WITHSTANDING VOLTAGE: 335 VRMS MIN AT 4 AND 7 MHz

3. MECHANICAL SPECIFICATIONS:
   - 3.1 ENGAGEMENT/DISENGAGEMENT TORQUE: 2 INCH POUNDS MAX
   - 3.2 MATING TORQUE: 7-10 INCH POUNDS WHEN SUPPORTED WITH WRENCH
     *8 INCH-POUNDS MAX UNSUPPORTED
   - 3.3 CONTACT RETENTION: 6 LBS MIN AXIAL FORCE
     4 OZ-IN MIN RADIAL TORQUE
   - 3.4 DURABLITY: 500 CYCLES MIN

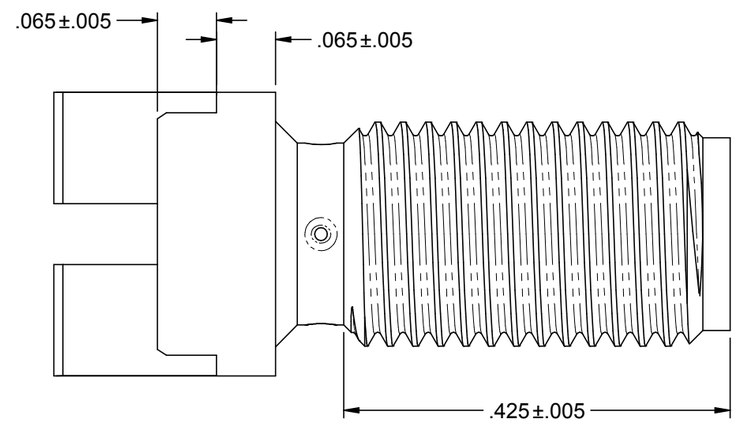
4. ENVIRONMENTAL SPECIFICATIONS:
   - 4.1 (MEETS OR EXCEEDS THE APPLICABLE PARAGRAPH OF MIL-PRF-39012)
   - 4.2 THERMAL SHOCK: MIL-STS-202, METHOD 107, CONDITION B,
   - 4.3 EXCEPT 115°C HIGH TEMP
   - 4.4 OPERATING TEMPERATURE: -65°C TO 165°C
   - 4.5 CORROSION: MIL-STD-202, METHOD 101, CONDITION B
   - 4.6 SHOCK: MIL-STD-202, METHOD 213, CONDITION I
   - 4.7 VIBERATION: MIL-STD-202, METHOD 204, CONDITION D
   - 4.8 MOISTURE RESISTANCE: MIL-STD-202, METHOD 106

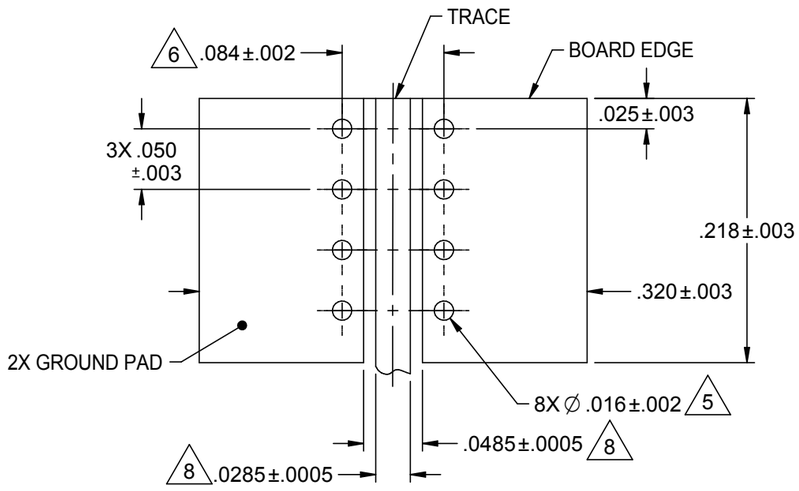
5. ALL HOLES PLATED THRU ENTIRE CIRCUIT BOARD STACKUP.

6. HOLE PATTERNS SYMMETRICAL ABOUT CENTER OF CPW TRACE.

7. FOR OPTIMUM CIRCUIT BOARD HIGH FREQUENCY PROFORMANCE:
   - 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.

8. 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)





MOUNTING FOOTPRINT
(TOP VIEW, INCLUDING TRACE DIMENSIONS)

Please read our datasheet & drawing disclaimer here.

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INTERPRET DRAWING IN ACCORDANCE WITH ASME Y14.5-2009.

3RD ANGLE PROJECTION

RoHS2 2011/65/EU

UNLESS OTHERWISE SPECIFIED UNITS: INCH

JOHNSON

Title: HIGH FREQ END LAUNCH SMA BKHD JACK ASSEMBLY, EDGE MOUNT, 15 MIL PIN

Model No. 142-0781-821/830

Size	DO NOT SCALE DRAWING	Date:	Sheet 1 of 1
B		5/19/2015	