

Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Bel Fuse Inc.](#)
[142-1701-821](#)

For any questions, you can email us directly:
sales@integrated-circuit.com



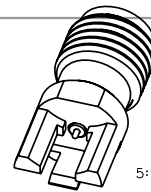
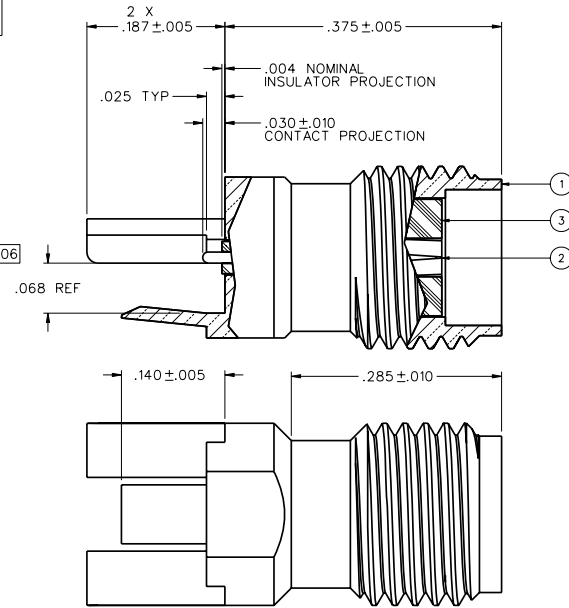
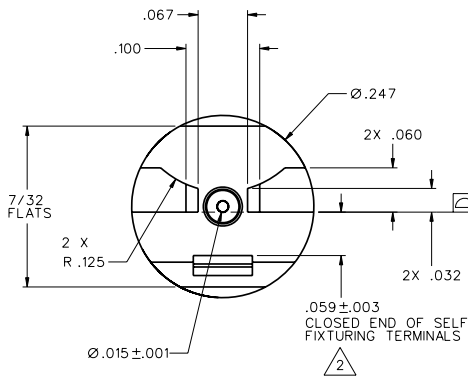
Distributor of Bel Fuse Inc.: Excellent Integrated System Limited

Datasheet of 142-1701-821 - CONN SMA JACK 50 OHM EDGE MNT

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

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

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



NOTES:

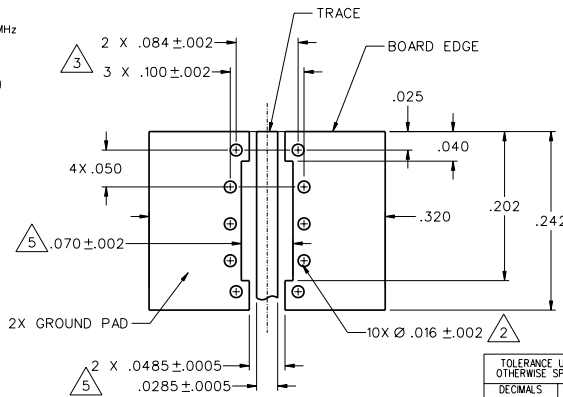
1. SPECIFICATIONS:

- 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
 - 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 1
 - 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 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. 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.



TRACE LAYOUT
10:1 (TOP VIEW)

CUSTOMER DRAWING

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

"µ STATION"

COMPANY CONFIDENTIAL

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

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	DRAWING NO.
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