

**NOTES**

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.  
 2.0 ALL RESISTORES ARE ±5% TOLERANCE.

**ELECTRICAL SPECIFICATIONS:**

- 1.0 TURNS RATIO: (P8-P6-P7) : (J3-J6) : 1CT : 1CT ±3%  
 (P4-P5-P3) : (J1-J2) : 1CT : 1CT ±3%
- 2.0 INDUCTANCE: (P7-P8) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias  
 (P4-P3) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias
- 3.0 LEAKAGE INDUCTANCE: P8-P7 (WITH J6 AND J3 SHORT) : 0.3uH MAX. @ 1MHz  
 P4-P3 (WITH J2 AND J1 SHORT) : 0.3uH MAX. @ 1MHz
- 4.0 INTERWINDING CAPACITANCE: (P8,P6,P7) TO (J6,J3) : 25pf TYP @ 1MHz  
 (P4,P5,P3) TO (J2,J1) : 25pf TYP @ 1MHz
- 5.0 DC RESISTANCE: (J6-J3)=(J2-J1) : 1.2 ohms Max.
- 6.0 RETURN LOSS: (P7-P8)=100 OHMS AND (P1-P2)=100 OHM REF.  
 1MHz TO 30MHz : -18dB MIN.  
 30MHz TO 60MHz : -(19-20 LOG (f/30MHz))  
 60MHz TO 80MHz : -12dB MIN.
- NOTE: 100 OHMS CONNECTED TO (J2-J1) OR (J6-J3).
- 7.0 DIELECTRIC WITHSTAND: (J1, J2) TO (P7, P8) : 1500 VAC  
 (J3, J6) TO (P1,P2) : 1500 VAC
- 8.0 INSERTION LOSS: RS=RL=100 ohms  
 1-65MHz : -1 dB MAX
- 9.0 RISE TIME: RS=100 OHMS AND RL = 100 OHMS  
 OUTPUT VOLTAGE = 1 V peak : 3.0 nS MAX  
 PULSE WIDTH= 112nS : 3.0 nS MAX
- 10.0 CROSS TALK: 1-65MHz : -35 dB MIN
- 11.0 COMMON TO COMMON MODE ATTENUATION: 30MHz TO 100MHz : -30dB MAX  
 100MHz TO 130MHz : -20dB MAX

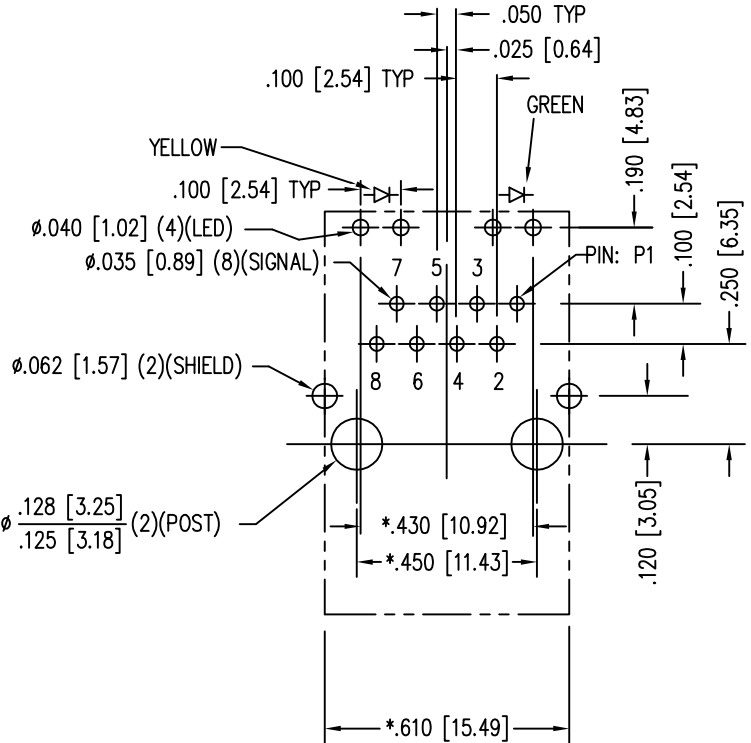
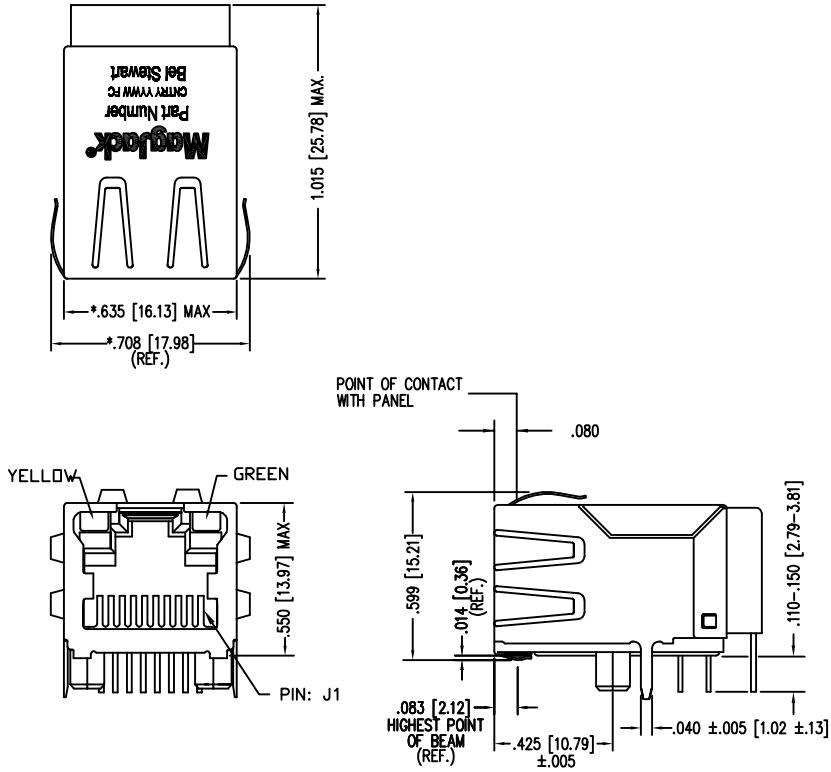
Bel Stewart Connector  
 11118 Susquehanna Trail, South  
 Glen Rock, Pa 17327-9199  
 717.234.7512

**MagJack**  
<http://www.stewartconnector.com>

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STANDARD LED	WAVELENGTH	* Forward V (MAX)	(TYP)
GREEN	565 nm	2.5 V	2.2 V
YELLOW	590 nm	2.5 V	2.1 V

\* WITH A FORWARD CURRENT OF 20 mA



P.C.B. RECOMMENDED HOLE LAYOUT  
 SEEN FROM COMPONENT SIDE  
 TOLERANCE ±.003 [0.08] UNLESS OTHERWISE SPECIFIED

- NOTES:
- TOLERANCES COMPLY WITH F.C.C. DIMENSION REQUIREMENTS
  - DIMENSIONS SHOWN WITH "\*" TO BE CENTRAL ABOUT CENTER LINE
  - DIMENSIONS SHOWN ARE SUBJECT TO CHANGE WITHOUT NOTICE.
  - PIN NOT ELECTRICALLY CONNECTED MAYBE OMITTED. SEE ELECTRICAL DRAWING FOR OMITTED PINS.
  - 50 MICRO-INCH SELECTIVE GOLD PLATING

CT750006

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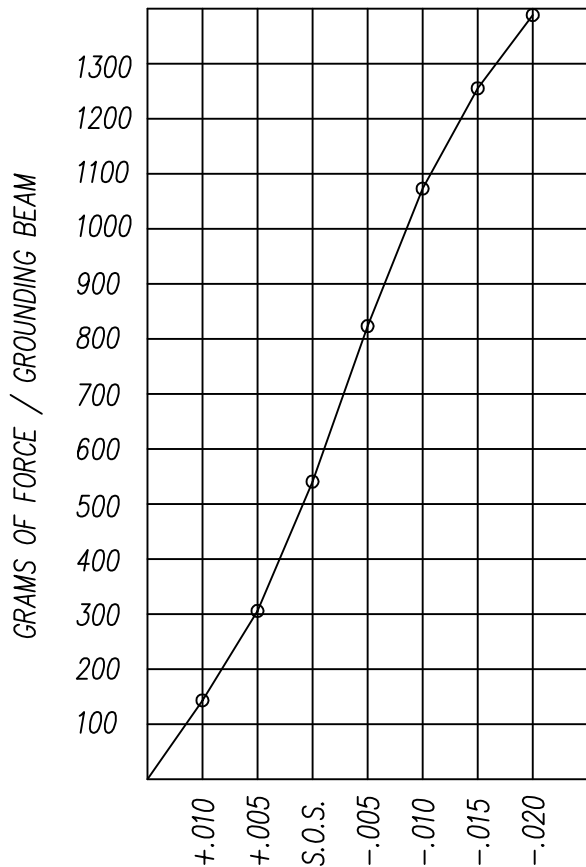
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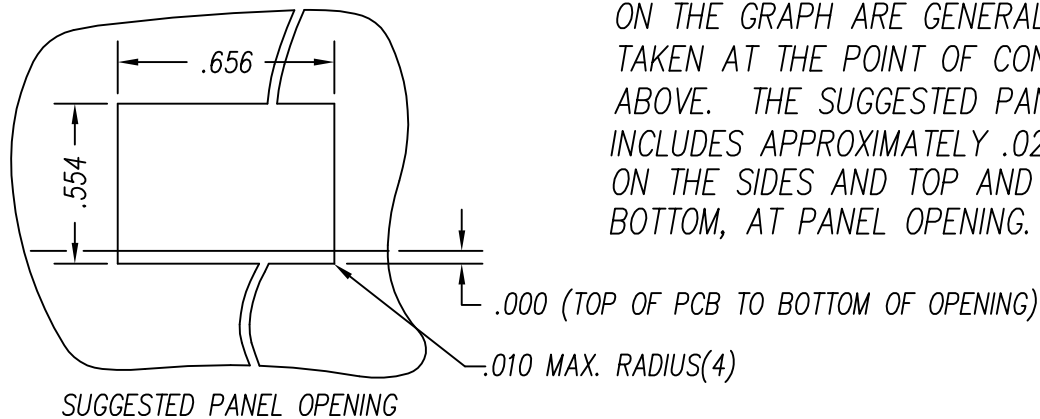
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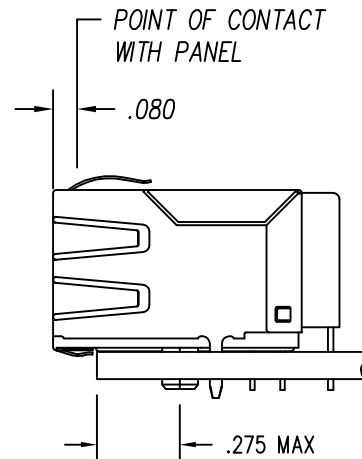
DRAWING NO. SI-50123 REV. 02



PANEL GROUNDING BEAM DEFLECTION  
S.O.S. = SUGGESTED OPENING SIZE



SUGGESTED PANEL OPENING



THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE THE USER THE ABILITY TO HAVE REASONABLE JACK / PANEL CLEARANCES YET MAINTAIN RELIABLE GROUNDING CAPABILITY. THESE VARIABLES CAN BE ADJUSTED IN EITHER DIRECTION BUT MAY CARRY SOME CONSEQUENCES IN THE FORM OF LOWER MATING FORCES OR TIGHTER ASSEMBLY TOLERANCES. FORCE VALUES ON THE GRAPH ARE GENERAL AVERAGES TAKEN AT THE POINT OF CONTACT SHOWN ABOVE. THE SUGGESTED PANEL OPENING INCLUDES APPROXIMATELY .020 CLEARANCE ON THE SIDES AND TOP AND .013 ON THE BOTTOM, AT PANEL OPENING.

CT720034X1/24-001302

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