

ELECTRICAL SPECIFICATIONS:

1.0 TURNS RATIO:  $(P4-P5-P6) : (J3-J6)$  : 1CT : 1CT ± 3%  
 $(P3-P2-P1) : (J1-J2)$  : 1CT : 1CT ± 3%

2.0 INDUCTANCE:  $(P6-P4)$  : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias  
 $(P3-P1)$  : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias

3.0 LEAKAGE INDUCTANCE:  $P6-P5-P4$  (WITH J6 AND J3 SHORT) : 0.3 MAX. @ 1MHz  
 $P3-P2-P1$  (WITH J2 AND J1 SHORT) : 0.3 MAX. @ 1MHz

4.0 INTERWINDING CAPACITANCE:  $(P6,P5,P4)$  TO  $(J6,J3)$  : 30pf MAX @ 1MHz  
 $(P3,P2,P1)$  TO  $(J2,J1)$  : 30pf MAX. @ 1MHz

5.0 DC RESISTANCE:  $(J6-J3)=(J2-J1)$  : 1.2 ohms Max.

NOTES

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

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

**MagJack**

<http://www.stewartconnector.com>

THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND PROPERTY OF BEL STEWART CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT PRIOR WRITTEN CONTENT OF BEL STEWART CONNECTOR. THE SUBJECT MATTER MAY BE PATENTED OR A PATENT MAY BE PENDING.

SHEET  
1 OF 4

DRAWING NO.

SI-50005 REV. 04

RECEIVE

6.0 RETURN LOSS: (P6-P4)=100 OHMS AND (P1-P3)=100 OHM REF.

1MHz TO 30MHz : 16dB MIN.  
30MHz TO 80MHz : 12dB MIN.

NOTE: 100 OHMS CONNECTED TO (J2-J1) OR (J6-J3).

7.0 DIELECTRIC WITHSTAND: (J1, J2) TO (P1, P3) : 1500 VAC  
(J3, J6) TO (P4,P6) : 1500 VAC

8.0 INSERTION LOSS: RS=RL=100 ohms : 1.1 dB TYP  
100KHz TO 100MHz

9.0 RISE TIME: RS=100 OHMS AND RL = 100 OHMS : 3.0 nS MAX  
OUTPUT VOLTAGE = 1 V peak : 3.0 nS MAX  
PULSE WIDTH= 112nS

10.0 CROSS TALK: 1-100 MHz : 30 dB TYP

11.0 COMMON TO COMMON MODE ATTENUATION: 1MHz TO 100MHz : 35dB TYP

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

**MagJack**

<http://www.stewartconnector.com>

THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND PROPERTY OF BEL STEWART CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT PRIOR WRITTEN CONTENT OF BEL STEWART CONNECTOR. THE SUBJECT MATTER MAY BE PATENTED OR A PATENT MAY BE PENDING.

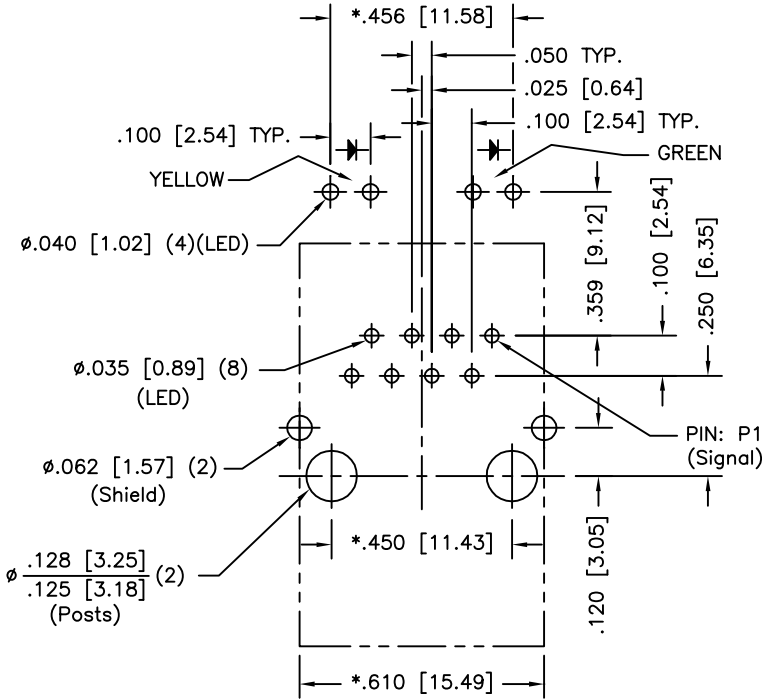
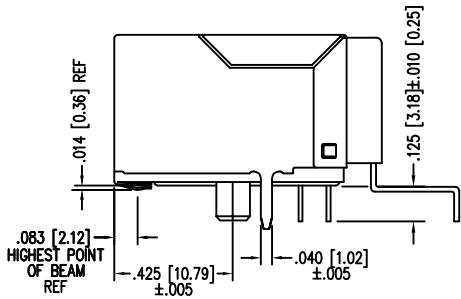
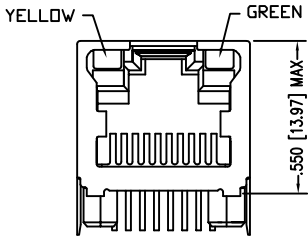
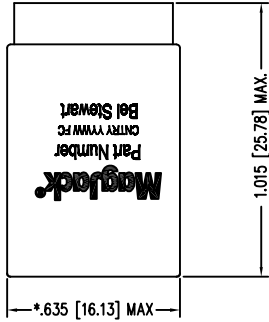
SHEET  
2 OF 4

DRAWING NO.

SI-50005 REV. 04

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

\* WITH A FORWARD CURRENT OF 20 mA



P.C.B. RECOMMENDED HOLE LAYOUT  
SEEN FROM COMPONENT SIDE  
TOLERANCE  $\pm.003$  [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.
  - STANDARD 50 MICRO-INCH SELECTIVE GOLD PLATING
  - HIGH TEMPERATURE REFLOW COMPATABLE - 230°C/90 SEC MAX.
  - ALL POLYMERS FLAMMABILITY - UL94V0

CT750006

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

**MagJack**

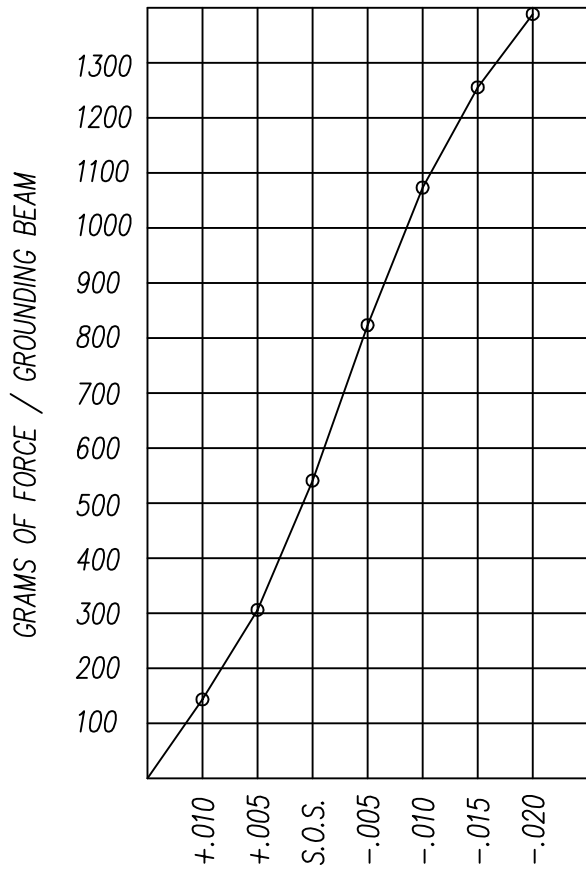
<http://www.stewartconnector.com>

THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND PROPERTY OF BEL STEWART CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT PRIOR WRITTEN CONTENT OF BEL STEWART CONNECTOR. THE SUBJECT MATTER MAY BE PATENTED OR A PATENT MAY BE PENDING.

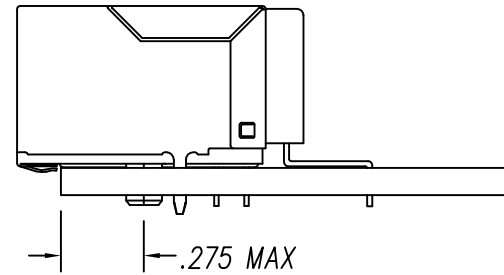
SHEET  
3 OF 4

DRAWING NO.

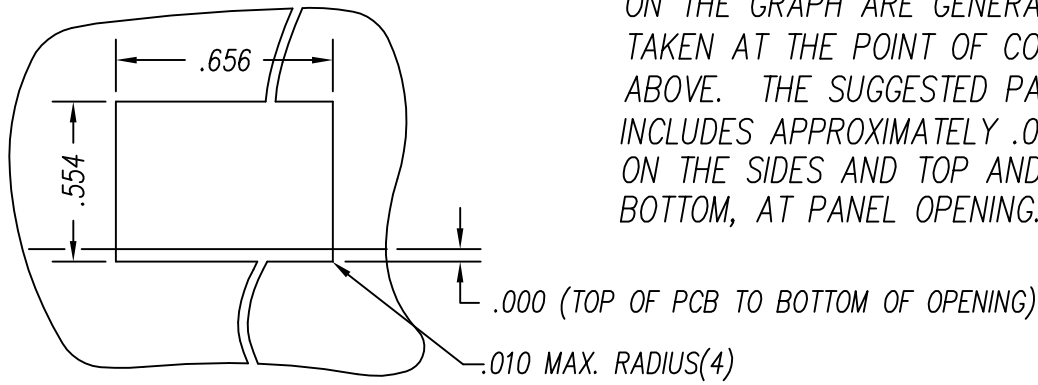
SI-50005 REV. 09



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



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.



SUGGESTED PANEL OPENING

CT720034X1/24-001302

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

**MagJack**

<http://www.stewartconnector.com>

THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND PROPERTY OF BEL STEWART CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT PRIOR WRITTEN CONTENT OF BEL STEWART CONNECTOR. THE SUBJECT MATTER MAY BE PATENTED OR A PATENT MAY BE PENDING.

SHEET  
4 OF 4

DRAWING NO.

SI-50005 REV. 09