

ELECTRICAL SPECIFICATIONS:

- |     |  |  |
|-----|--|--|
| 1.0 | URNS RATIO: (P6-P5-P4) : (J6-J3)<br>(P3-P2-P1) : (J2-J1)                         | : 1CT : 1CT ± 3%<br>: 1CT : 1CT ± 3%   |
| 2.0 | INDUCTANCE: (P6-P4)<br>(P3-P1)   | : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias<br>: 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias |
| 3.0 | LEAKAGE INDUCTANCE: P6-P4 (WITH J6 AND J3 SHORT)<br>P3-P1 (WITH J2 AND J1 SHORT) | : 0.3 MAX. @ 1MHZ<br>: 0.3 MAX. @ 1MHZ   |
| 4.0 | INTERWINDING CAPACITANCE: (P6,P5,P4) TO (J6,J3)<br>(P3,P2,P1) TO (J2,J1)         | : 30pf MAX @ 1MHZ<br>: 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**  
11116 Susquehanna Trail, South  
Glen Rock, Pa. 17327-0190  
717.234.7812

**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 CONSENT OF BEL STEWART CONNECTOR. THE SUBJECT MATTER MAY BE PATENTED OR A PATENT MAY BE PENDING.

SHEET  
1 OF 4

DRAWING NO.

SI-40144

REV. 15

RECEIVE

6.0 RETURN LOSS: 1MHz TO 30MHz : 18dB MIN.  
60MHz 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: 1MHz TO 100MHz : 40 dB TYP

11.0 COMMON TO COMMON MODE ATTENUATION: 30MHz TO 100MHz : 35dB TYP

**Bel Stewart Connector**  
11118 Susquehanna Trail, South  
Glen Rock, Pa. 17327-0100  
717.234.7812

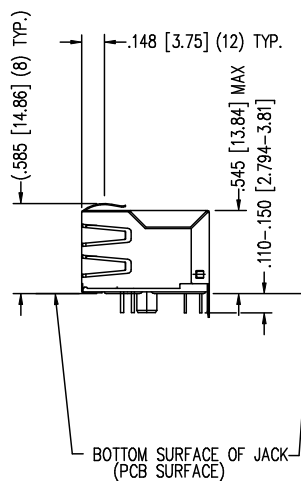
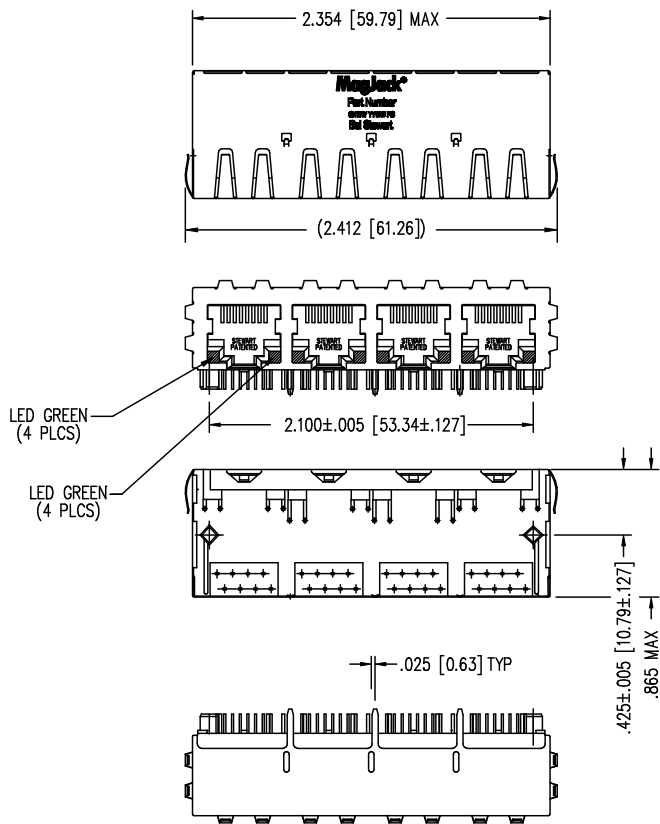
**MagJack®**  
<http://www.stewartconnector.com>

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 CONSENT OF BEL STEWART CONNECTOR. THE SUBJECT MATTER MAY BE PATENTED OR A PATENT MAY BE PENDING.

SHEET  
2 OF 4

DRAWING NO. SI-40144

REV. 15



NOTES:

- CONNECTOR MATERIALS:  
HOUSING: THERMOPLASTIC UL94 V-0  
CONTACT/SHIELD: COPPER ALLOY  
SHIELD PLATING: NICKEL OR TIN  
CONTACT PLATING: SELECTIVE GOLD,  
50 MICRO-INCHES MIN. IN CONTACT AREA.
- PIN NOT ELECTRICALLY CONNECTED MAYBE OMITTED.  
SEE ELECTRICAL DRAWING FOR OMITTED PINS.
- TOLERANCES COMPLY WITH F.C.C. DIMENSION REQUIREMENTS.
- ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE ±.005 [0.13]
- WAVE SOLDER COMPATIBLE - PREHEAT 125°C/90SECS.

LED SPECIFICATION				
STANDARD LED	WAVELENGTH	* Forward V (MAX)	(TYP)	
GREEN	565 nm	2.5 V	2.1 V	

\*WITH A FORWARD CURRENT OF 20 mA

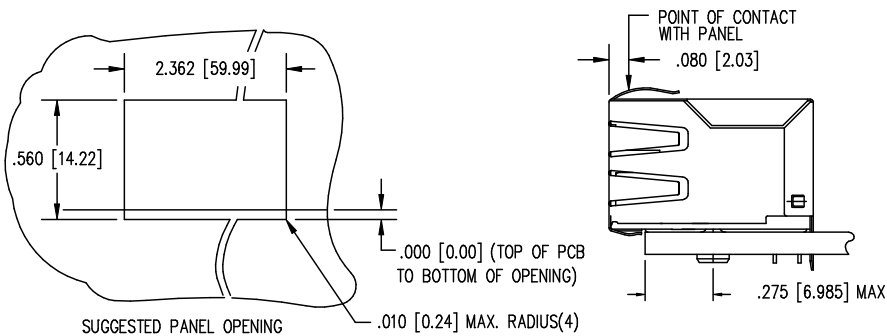
**Bel Stewart Connector**  
11116 Susquehanna Trail, South  
Glen Rock, Pa. 17327-0190  
717.234.7512

**MagJack®**

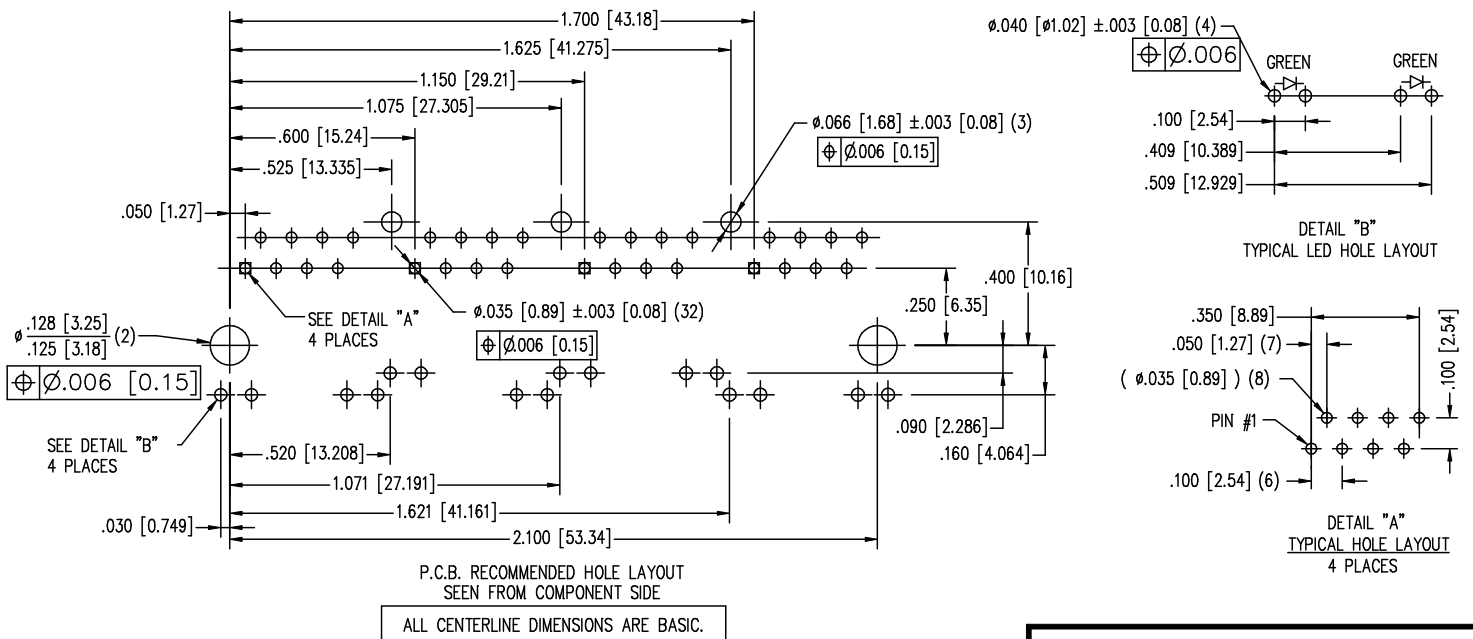
<http://www.stewartconnector.com>

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-40144 REV. 07



1. THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE THE USER THE ABILITY TO HAVE REASONABLE JACK / PANEL CLEARANCES YET MAINTAIN RELIABLE GROUNDING CAPABILITY.
2. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE  $\pm 0.005$  [0.13]



**Bel Stewart Connector**  
11116 Susquehanna Trail, South  
Glen Rock, Pa. 17327-0190  
717.234.7512  
<http://www.stewartconnector.com>

**MagJack®**

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 CONSENT OF BEL STEWART CONNECTOR. THE SUBJECT MATTER MAY BE PATENTED OR A PATENT MAY BE PENDING.

SHEET 4 OF 4 DRAWING NO. SI-40144 REV. 07