

#### NOTES

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

#### ELECTRICAL SPECIFICATIONS:

OPERATING TEMPERATURE RANGE: : -40°C TO +85°C

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

2.0 INDUCTANCE: (P6-P4) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias, -40°C TO +85°C  
(P3-P1) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias, -40°C TO +85°C

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) : 35pF MAX @1 MHz  
(P3,P2,P1) TO (J2,J1) : 35pF MAX @1 MHz

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

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-55001

REV. 03

RECEIVE

6.0 RETURN LOSS: (P6-P4)=100 OHMS AND (P1-P3)=100 OHM REF.  
1MHz TO 30MHz : 18dB 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  
100KHz TO 100MHz : 1.1 dB TYP

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: 1-100 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>

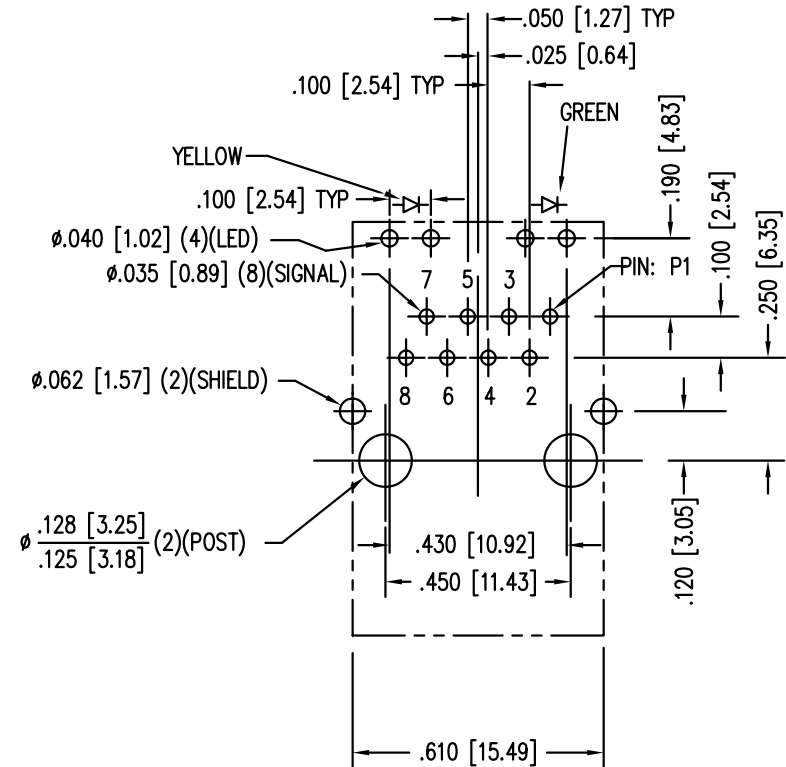
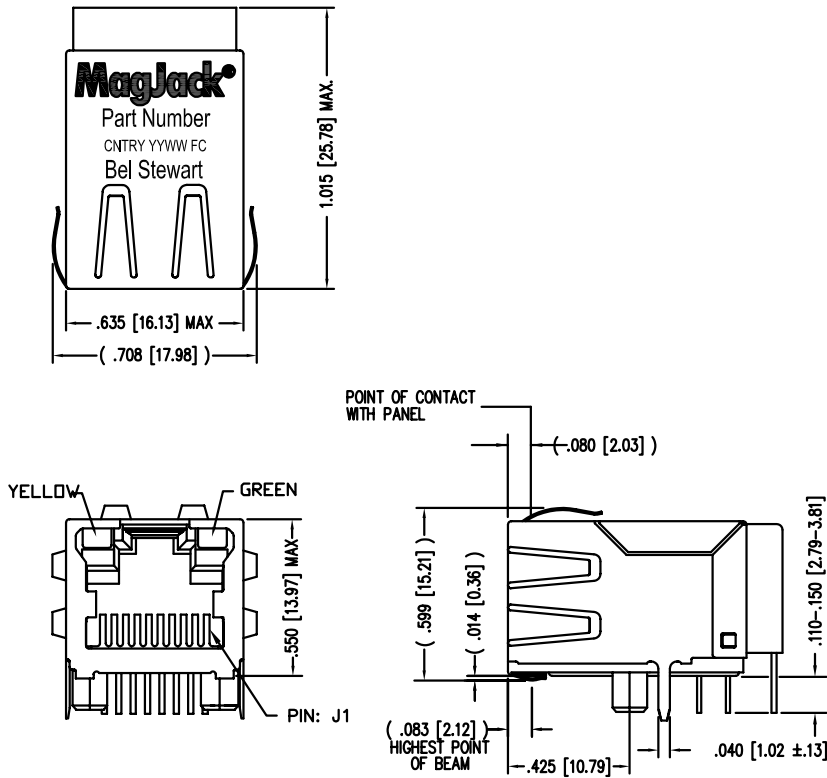
THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND PROPERTY OF BEL STEWART CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT PRIOR WRITTEN CONTENT OF BEL STEWART CONNECTOR. THE SUBJECT MATTER MAY BE PATENTED OR A PATENT MAY BE PENDING.

SHEET 2 OF 4

DRAWING NO. SI-55001 REV. 03

LED SPECIFICATION			
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 (TYP)



#### 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  $\pm 0.005$  [0.13]
- WAVE SOLDER COMPATIBLE - PREHEAT 125°C/90SECS.

P.C.B. RECOMMENDED HOLE LAYOUT  
SEEN FROM COMPONENT SIDE  
TOLERANCE  $\pm 0.003$  [0.08] UNLESS OTHERWISE SPECIFIED

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

**MagJack**

<http://www.stewartconnector.com>

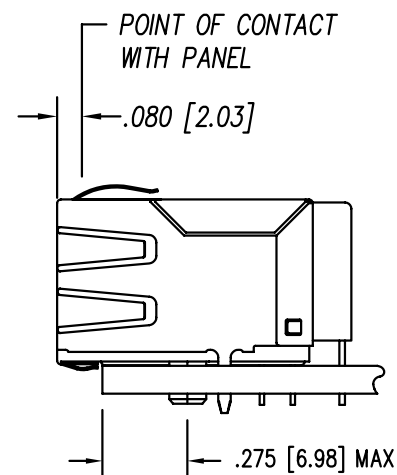
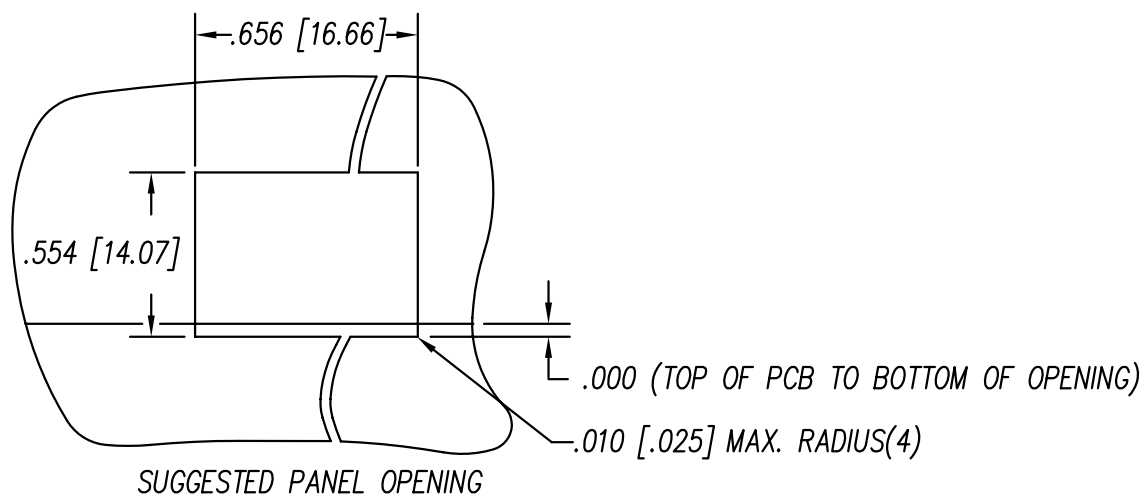
THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND PROPERTY OF BEL STEWART CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT PRIOR WRITTEN CONTENT OF BEL STEWART CONNECTOR. THE SUBJECT MATTER MAY BE PATENTED OR A PATENT MAY BE PENDING.

SHEET  
3 OF 4

DRAWING NO.

SI-55001

REV.  
03



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  $\pm .005$  [0.13]

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-55001 REV. 03