

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>

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ELECTRICAL SPECIFICATIONS:

- 1.0 TURNS RATIO: 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) : 1.4 ohms Max.
- 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

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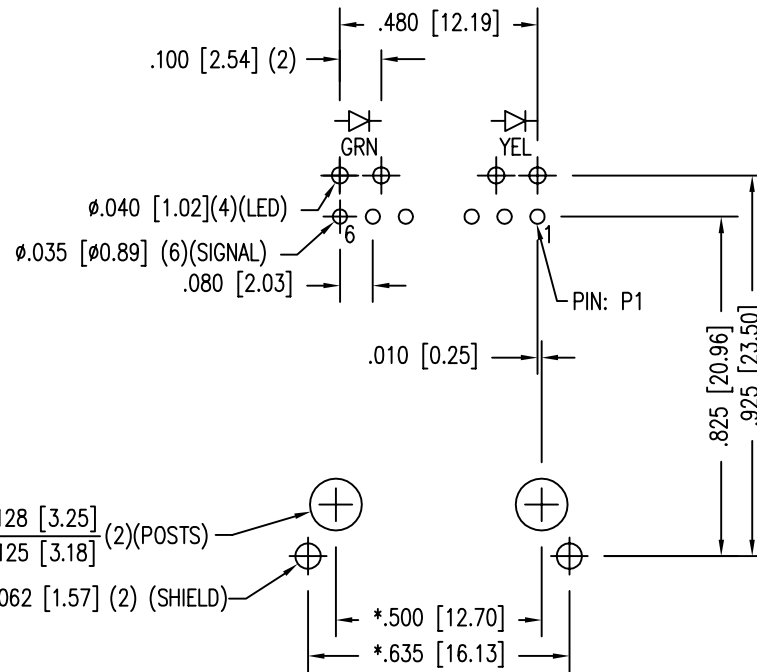
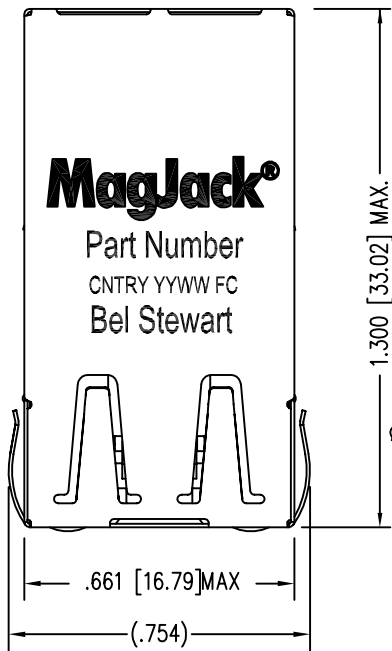
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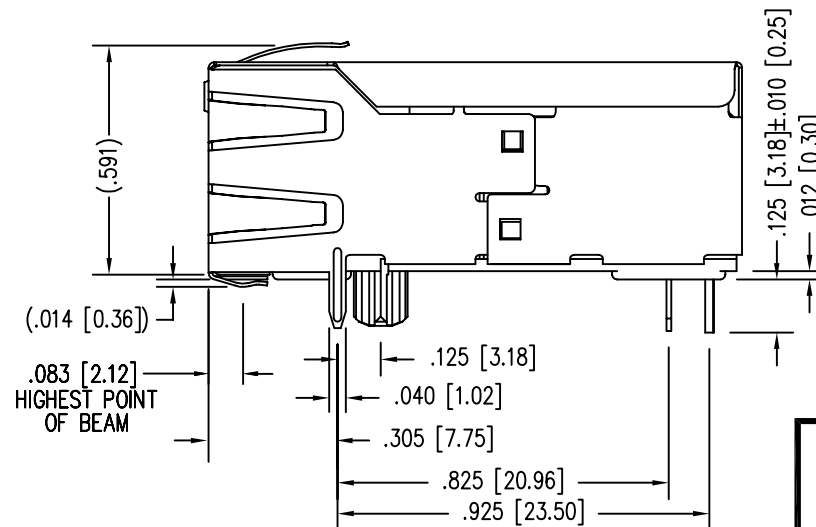
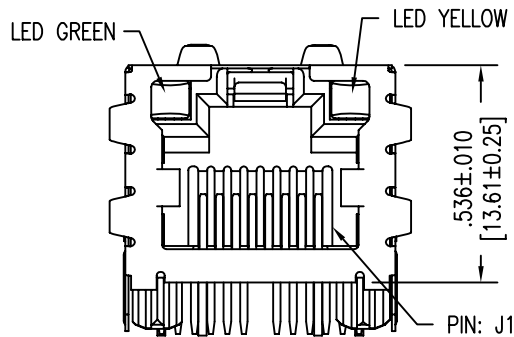
P.C.B. RECOMMENDED HOLE LAYOUT  
 SEEN FROM COMPONENT SIDE  
 TOLERANCE  $\pm 0.003$  [0.08] UNLESS OTHERWISE SPECIFIED

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.  
 HIGH TEMPERATURE REFLOW COMPATABLE - 230°C/90 SEC MAX.

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



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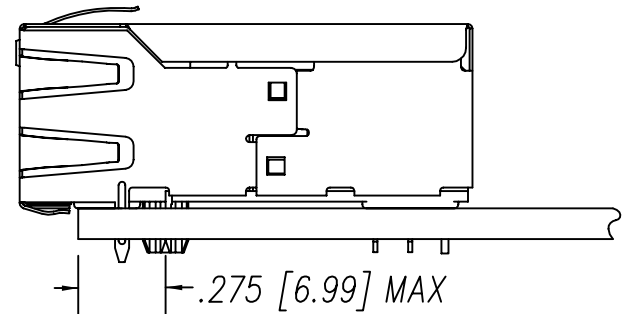
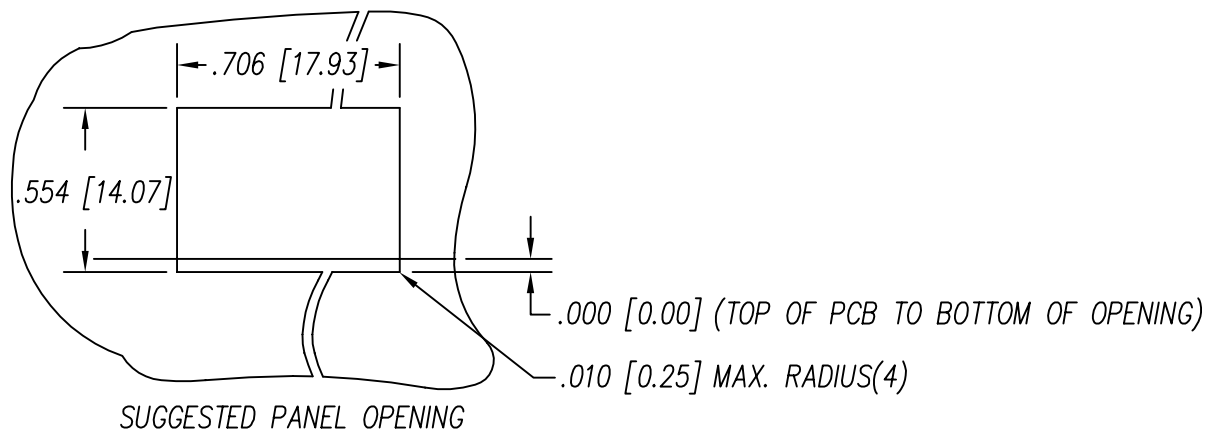
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1. THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE THE USER THE ABILITY TO HAVE REASONABLE JACK / PANEL CLEARANCES YET MAINTAIN RELIABLE GROUNDING CAPABILITY.
2. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE  $\pm 0.005$  [0.13]

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