

### NOTES

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

2.0 ALL RESISTORS ARE  $\pm 5\%$  TOLERANCE.

### ELECTRICAL SPECIFICATIONS:

- |   |                              |  |
|---|------------------------------|--|
| 1.0 TURNS RATIO:                        | (P8-P6-P7) : (J6-J3)         | : 1CT : 1 $\pm 3\%$                      |
|   | (P2-P3-P1) : (J2-J1)         | : 1CT : 1 $\pm 3\%$                      |
| 2.0 INDUCTANCE:                         | (P7-P8)                      | : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias |
|   | (P1-P2)                      | : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias |
| 3.0 LEAKAGE INDUCTANCE:                 | P8-P7 (WITH J6 AND J3 SHORT) | : 0.3 MAX. @ 1MHz                        |
|   | P2-P1 (WITH J2 AND J1 SHORT) | : 0.3 MAX. @ 1MHz                        |
| 4.0 INTERWINDING CAPACITANCE:           | (P8,P6,P7) TO (J6,J3)        | : 30pf MAX @ 1MHz                        |
|   | (P3,P2,P1) TO (J2,J1)        | : 30pf MAX @ 1MHz                        |
| 5.0 DC RESISTANCE:                      | (J1-J2)                      | : 1.2 ohms Max.                          |
|   | (J8-J7)                      | : 1.2 ohms Max.                          |
| 6.0 RETURN LOSS:                        | 1MHz TO 30MHz                | : -18dB MIN.                             |
|   | 30MHz TO 60MHz               | : -(19-20 LOG (f/30MHz))                 |
|   | 60MHz TO 80MHz               | : -12dB MIN.                             |
| 7.0 DIELECTRIC WITHSTAND:               | (J1, J2) TO (P1, P2)         | : 1500 VAC                               |
|   | (J3, J6) TO (P8, P7)         | : 1500 VAC                               |
| 8.0 INSERTION LOSS:                     | 1MHz TO 65MHz                | : -1.0 dB MAX                            |
|   | 65MHz TO 100MHz              | : -1.1 dB MAX                            |
| 9.0 RISE TIME:                          | OUTPUT VOLTAGE = 1 V peak    | : 3.0 nS MAX                             |
|   | PULSE WIDTH= 112nS           | : 3.0 nS MAX                             |
| 10.0 CROSS TALK:                        | 1-100 MHz                    | : -35 dB TYP                             |
| 11.0 COMMON TO COMMON MODE ATTENUATION: | 1MHz TO 100MHz               | : -45dB TYP                              |
|   | 100MHz TO 200MHz             | : -20dB MIN                              |

Bel Stewart Connector

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Glen Rock, Pa 17327-9199  
717.234.7512

**MagJack**

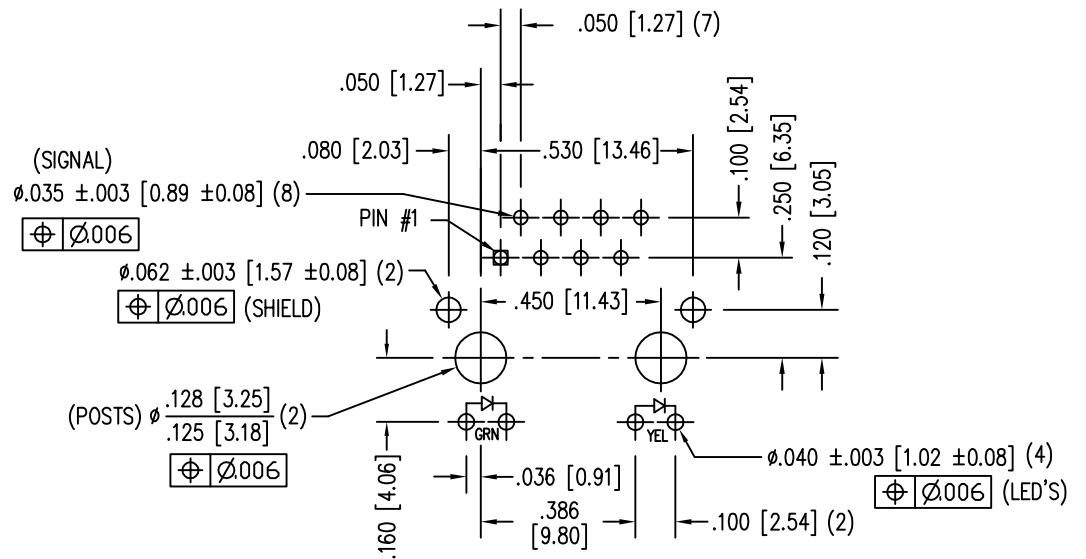
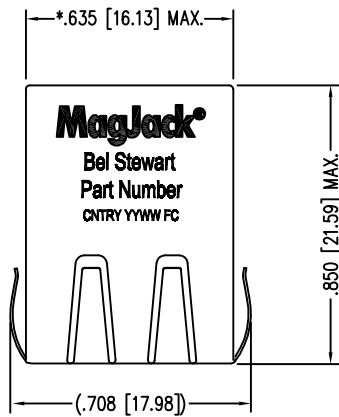
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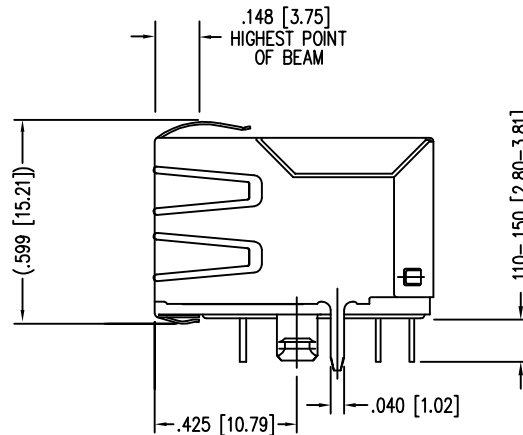
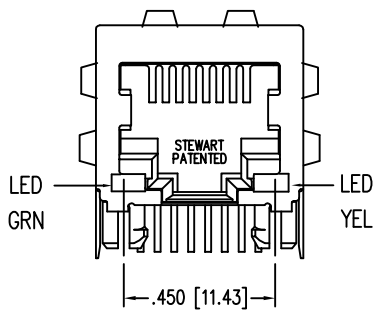
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P.C.B. RECOMMENDED HOLE LAYOUT  
SEEN FROM COMPONENT SIDE

ALL CENTERLINE DIMENSIONS ARE BASIC.



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.
- 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
YELLOW	590 nm	2.5 V	2.1 V

\*WITH A FORWARD CURRENT OF 20 mA

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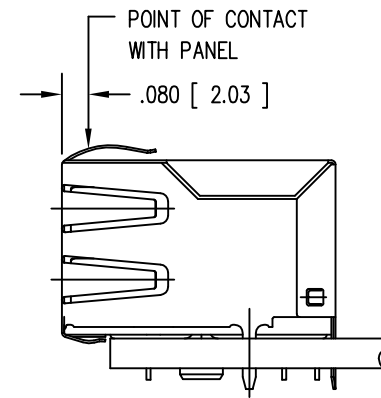
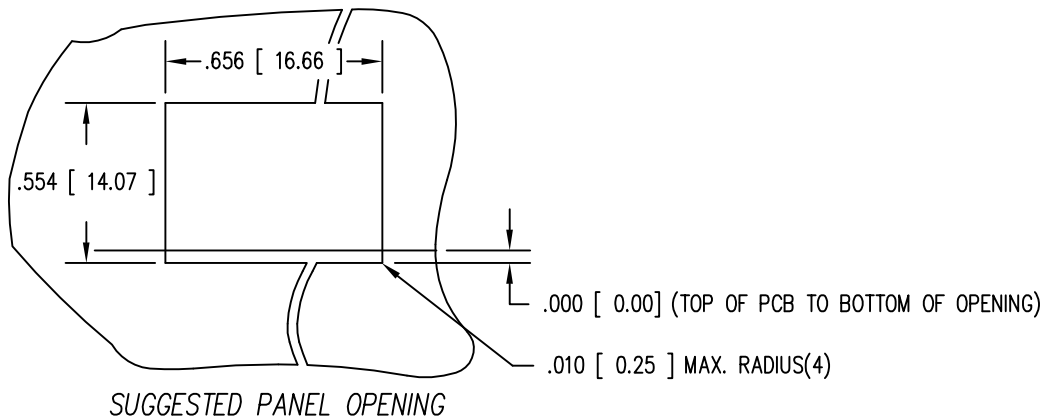
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