

NOTES

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

ELECTRICAL SPECIFICATIONS:

- 1.0 TURNS RATIO: (P5-P4-P3) : (J3-J6)
(P8-P7-P6) : (J1-J2) : 1CT : 1CT ±3%
: 1CT : 1CT ±3%
- 2.0 INDUCTANCE: (P6-P8) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias
(P5-P3) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias
- 3.0 LEAKAGE INDUCTANCE: P8-P6 (WITH J1 AND J2 SHORT) : 0.3uH MAX. @ 1MHz
P5-P3 (WITH J6 AND J3 SHORT) : 0.3uH MAX. @ 1MHz
- 4.0 INTERWINDING CAPACITANCE: (P8,P6,P7) TO (J1,J2) : 30pf MAX @ 1MHz
(P5,P3,P4) TO (J3,J6) : 30pf MAX @ 1MHz
- 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>

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SHEET 1 OF 4

DRAWING NO. SI-50117

REV. 01

RECEIVE

6.0 RETURN LOSS: (P6-P8)=100 OHMS AND (P5-P3)=100 OHM REF.
1MHz TO 30MHz
30MHz TO 80MHz

: 18dB MIN.
: 12dB MIN.

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

7.0 DIELECTRIC WITHSTAND: (J3, J6) TO (P5, P3)
(J2, J1) TO (P6,P8)

: 1500 VAC
: 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
PULSE WIDTH= 112nS

: 3.0 nS MAX
: 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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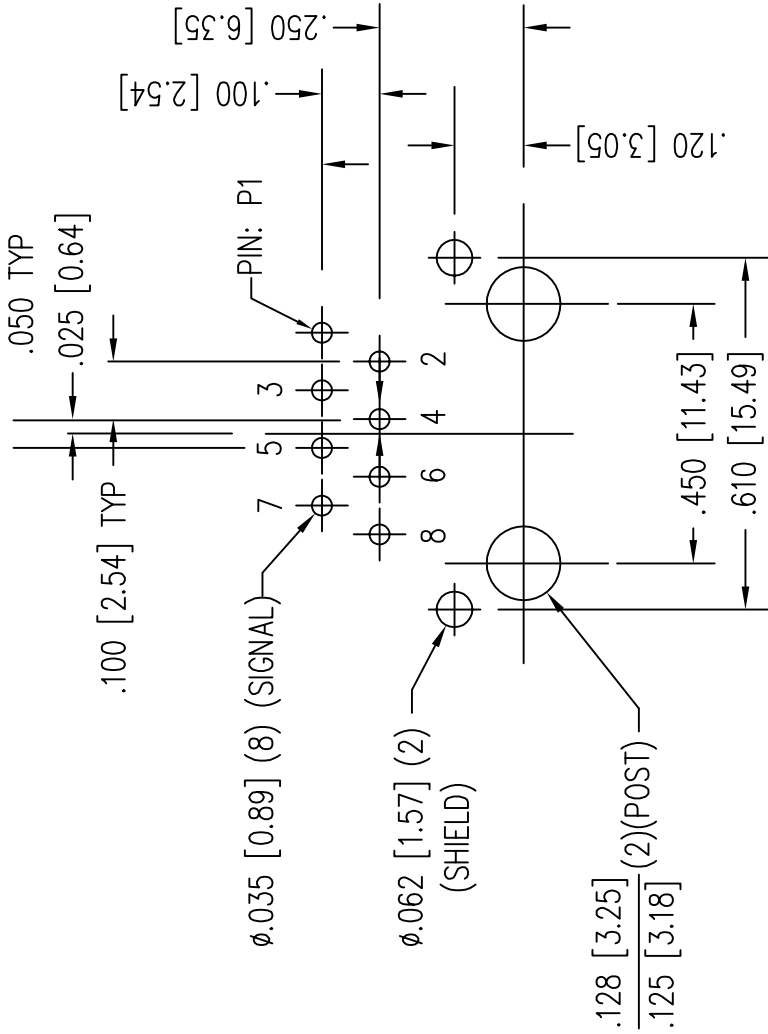
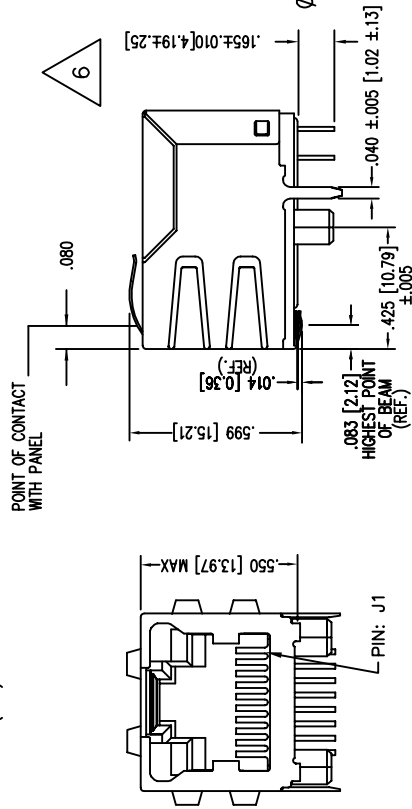
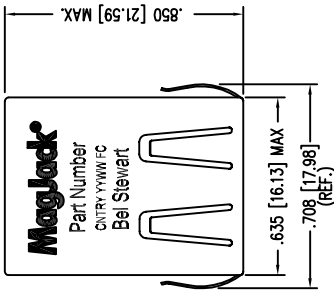
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DRAWING NO.

SI-50117

REV.
01



P.C.B. RECOMMENDED HOLE LAYOUT
 SEEN FROM COMPONENT SIDE
 TOLERANCE ±.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 ±.005 [0.13]
- WAVE SOLDER COMPATIBLE - PREHEAT 125°C/90SECS.
 HIGH TEMPERATURE REFLOW COMPATIBLE - 230°C/90 SEC MAX.

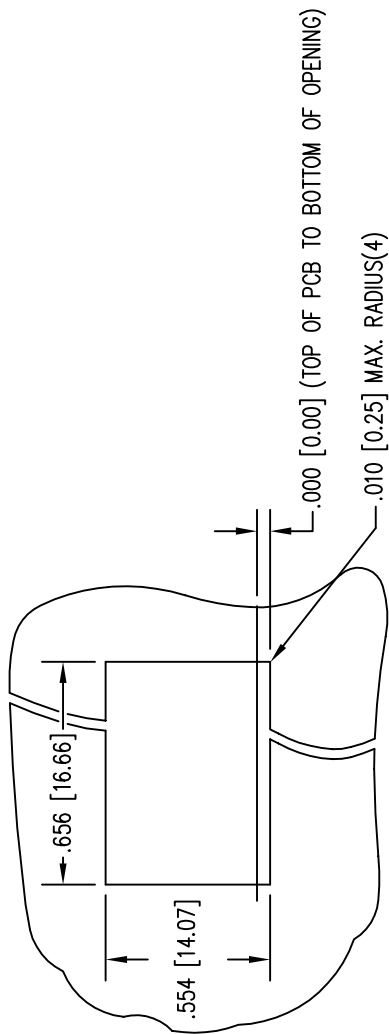
6 NOTE SPECIAL LEAD LENGTH

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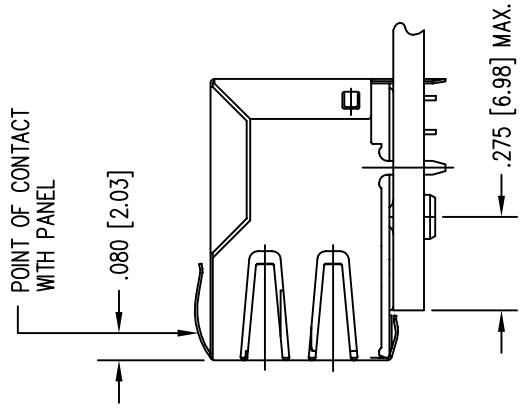
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SHEET 3 OF 4
 DRAWING NO. SI-50117
 REV. 04



SUGGESTED PANEL OPENING



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 ± 0.005 [0.13]

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