

ELECTRICAL SPECIFICATIONS:

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

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

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

3.0 LEAKAGE INDUCTANCE: P4-P6 (WITH J6 AND J3 SHORT) : 0.3uH MAX. @ 1MHz
P1-P3 (WITH J2 AND J1 SHORT) : 0.3uH MAX. @ 1MHz

4.0 INTERWINDING CAPACITANCE: (P4,P5,P6) TO (J6,J3) : 35pf MAX @ 1MHz
(P1,P2,P3) TO (J2,J1) : 35pf MAX @ 1MHz

5.0 DC RESISTANCE: (J6-J3)=(J2-J1) : 1.5 ohms Max.

NOTES

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

2.0 ALL RESISTORS ARE ±5% TOLERANCE.

3.0 CIRCUIT DESIGNED TO MEET GR1089 INTRA-BUILDING SURGE PROTECTION.

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

MagJack

<http://www.stewartconnector.com>

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RECEIVE

6.0 RETURN LOSS: (P4-P6)=100 OHMS AND (P1-P3) =100 OHM REF.
1MHz TO 30MHz : -18dB MIN.
30MHz TO 60MHz : -(19-20 LOG (F/30MHz))
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
1-65MHz : -1 dB MAX

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: 1-65MHz : -35 dB MIN

11.0 COMMON TO COMMON MODE ATTENUATION: 30MHz TO 100MHz : -30dB MAX
100MHz TO 130MHz : -20dB MAX

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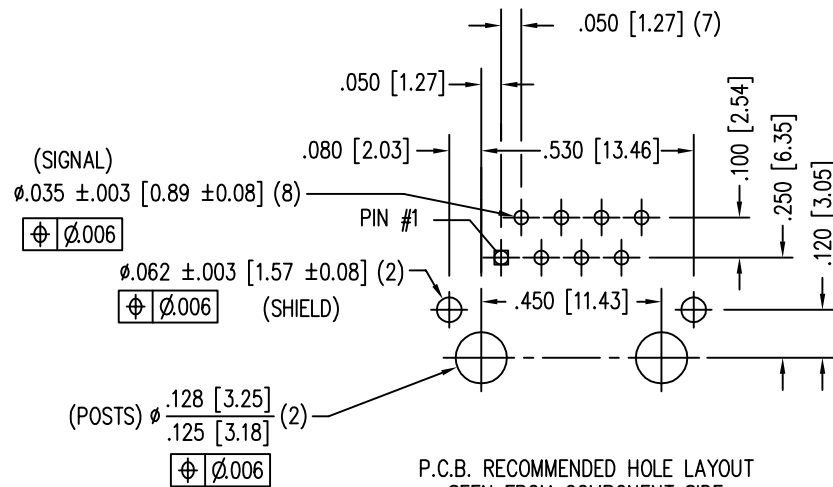
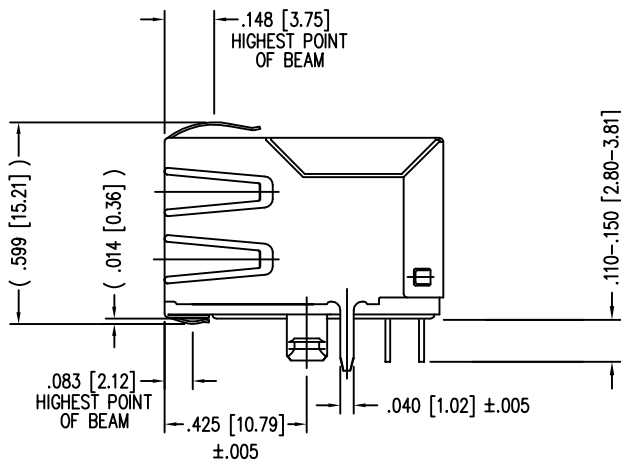
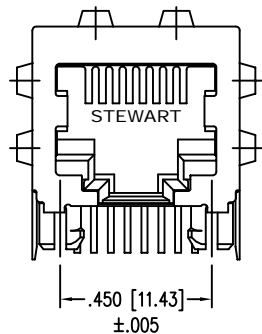
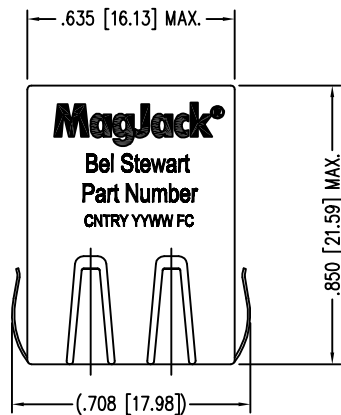
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NOTES:

- 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 $\pm .005 [0.13]$
- WAVE SOLDER COMPATIBLE - PREHEAT $125^{\circ}\text{C}/90\text{SECS}$.

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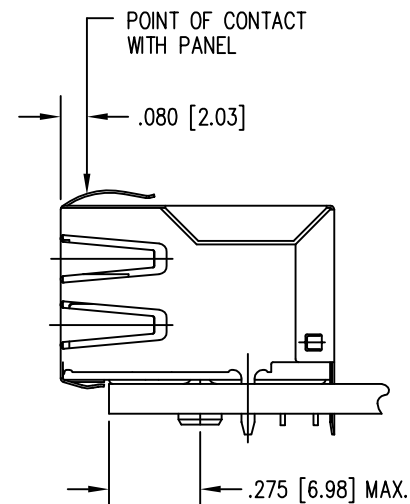
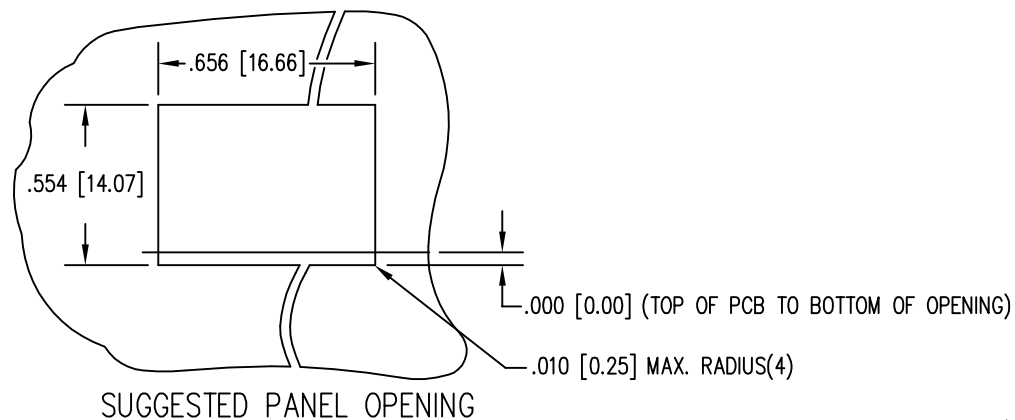
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1. THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE THE USER THE ABILITY TO HAVE REASONABLE JACK / PANEL CLEARANCES YET MAINTAIN RELIABLE GROUNDING CAPABILITY.
2. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE ± 0.005 [0.13]

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