

**NOTES:**

1.0 DESIGNED TO PROTECT AGAINST GR1089 INTRABUILDING AND ESD SURGES.

2.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

3.0 ALL RESISTORS ARE ±5% TOLERANCE.

ELECTRICAL SPECIFICATIONS:

1.0 INDUCTANCE: (P1-P3)  
(P4-P6)

350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias  
350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias

2.0 TURNS RATIO: (P1-P3) : (J1-J2)  
(P4-P6) : (J3-J6)

1CT : 1CT ± 3%  
1CT : 1CT ± 3%

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

**MagJack®**

<http://www.stewartconnector.com>

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SI-53022 REV X4

3.0 DC RESISTANCE: (J6-J3); (J2-J1) : 1.5 ohms Max.

4.0 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).

5.0 DIELECTRIC WITHSTAND: (J1, J2) TO (P1, P3) : 1500 VAC  
(J3, J6) TO (P4,P6) : 1500 VAC

6.0 INSERTION LOSS: RS=RL=100 ohms  
1-65MHz : -1 dB MAX

7.0 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

8.0 CROSS TALK: 1-65MHz : -35 dB MIN

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

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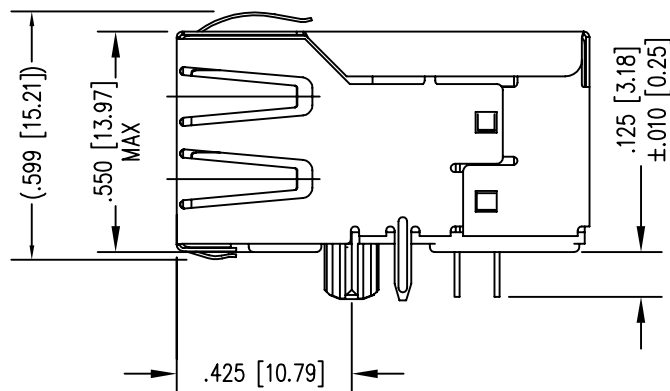
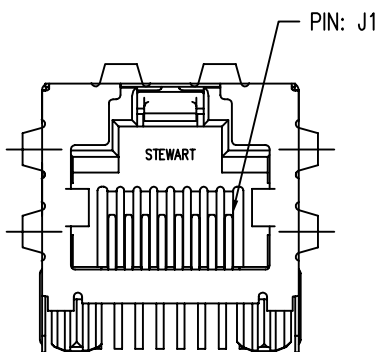
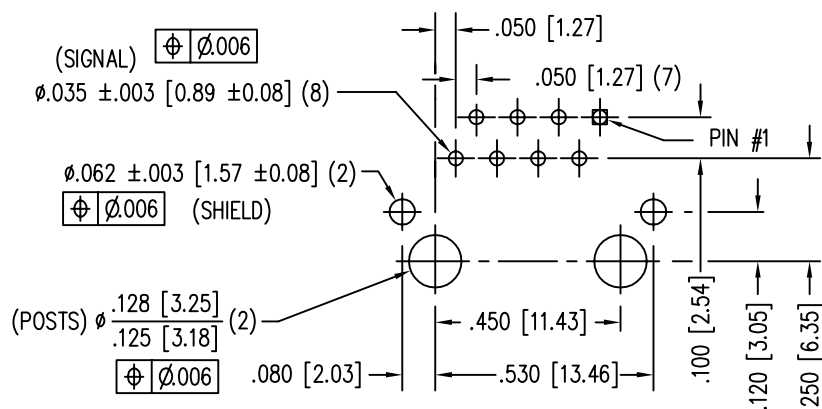
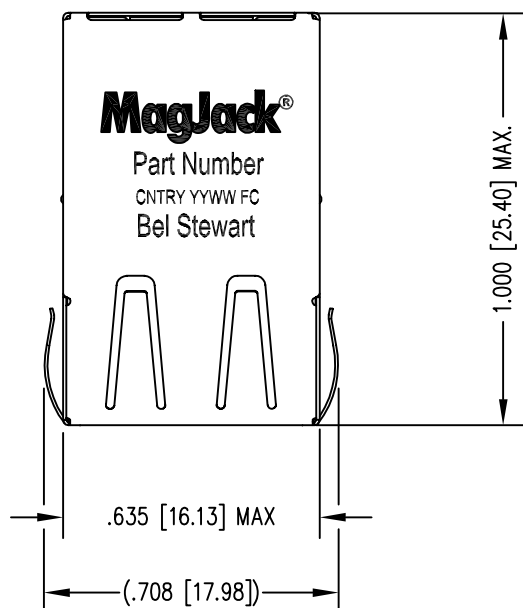
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NOTES:

- 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  $125^{\circ}\text{C}/90\text{SECS}$ .  
HIGH TEMPERATURE REFLOW COMPATABLE -  $230^{\circ}\text{C}/90 \text{ SEC MAX}$ .

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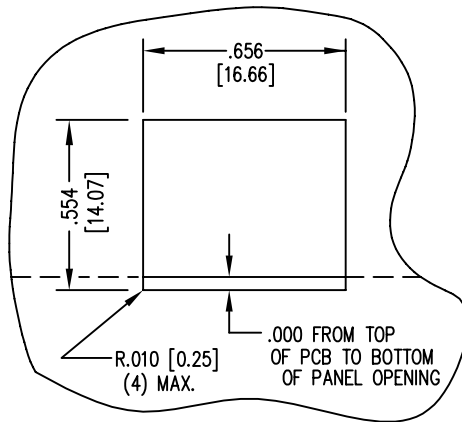
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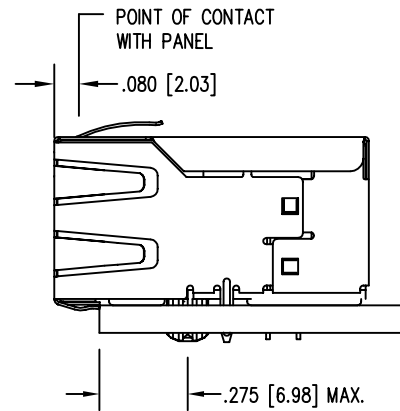
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SUGGESTED PANEL OPENING



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  $\pm 0.005$  [0.13]

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