

**NOTES:**  
DESIGNED TO PROTECT  
AGAINST GR1089  
INTRABUILDING AND  
ESD SURGES.

ELECTRICAL SPECIFICATIONS:

1.0 TURNS RATIO: (P10-P11) :	(J2-J1)	: 1 : 1 ±2%
(P5-P4) :	(J6-J3)	: 1 : 1 ±2%
(P2-P3) :	(J5-J4)	: 1 : 1 ±2%
(P9-P8) :	(J8-J7)	: 1 : 1 ±2%

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

**MagJack®**

<http://www.stewartconnector.com>

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- 2.0 DC RESISTANCE (J8-J7); (J6-J3); (J5-J4); (J2-J1) : 1.2 OHMS MAX.
- 3.0 INDUCTANCE: (P2-P3) ; (P5-P4) : 350 uH MIN. @ 0.1V, 100KHz, 8 mA DC BIAS  
(P10-P11) ; (P9-P8) : 350 uH MIN. @ 0.1V, 100KHz, 8 mA DC BIAS
- 4.0 RETURN LOSS: 1MHz TO 30MHz : -19dB MIN.  
30MHz TO 60MHz : -13dB MIN.  
60MHz TO 80MHz : -12dB MIN.  
80MHz TO 100MHz : -10dB MIN.
- 5.0 INSERTION LOSS: RS=RL=100 ohms : -1.1 dB TYP  
100KHz TO 125MHz
- 6.0 CROSS TALK: 1-100 MHz :  $-[33-20 \text{ LOG } (\frac{F}{50 \text{ MHz}})] \text{ MIN.}$
- 7.0 COMMON TO COMMON MODE ATTENUATION: 1MHz TO 100MHz : -35dB TYP
- 8.0 RISE TIME: RS=100 OHMS AND RL = 100 OHMS : 3.0 nS MAX  
OUTPUT VOLTAGE = 1 V peak : 3.0 nS MAX  
PULSE WIDTH= 112nS
- 9.0 DIELECTRIC WITHSTAND: (J1,J2) TO (P11,P10) ; (J4,J5) TO (P3-P2) : 1500 VAC  
(J3,J6) TO (P4,P5) ; (J7,J8) TO (P8, P9) : 1500 VAC

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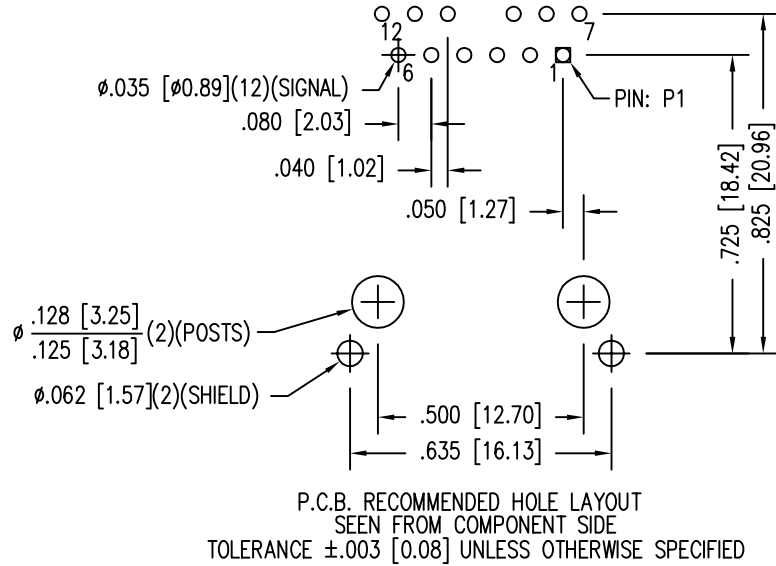
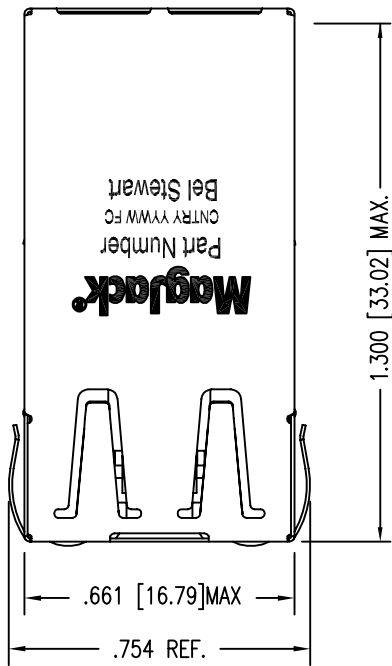
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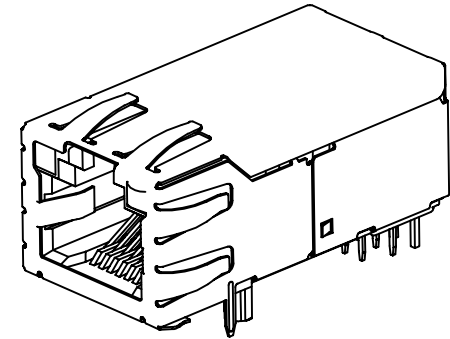
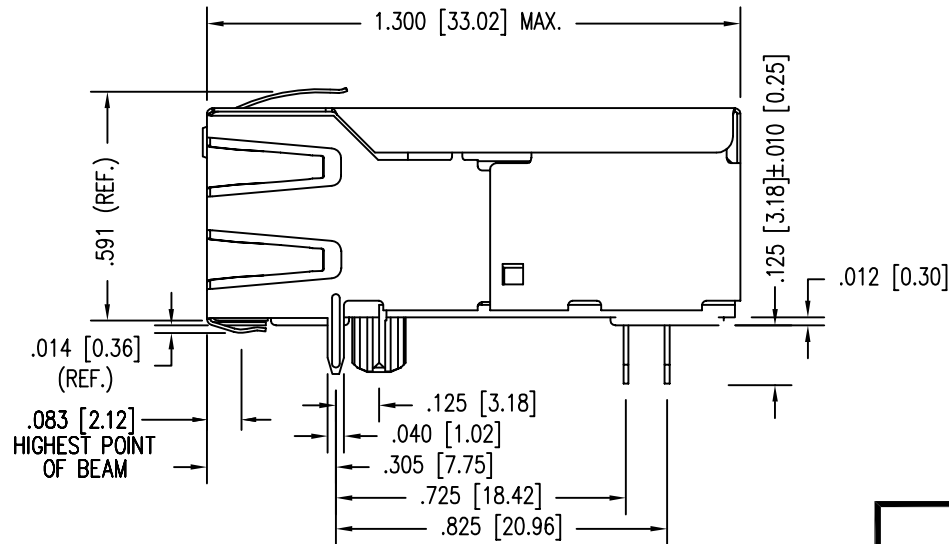
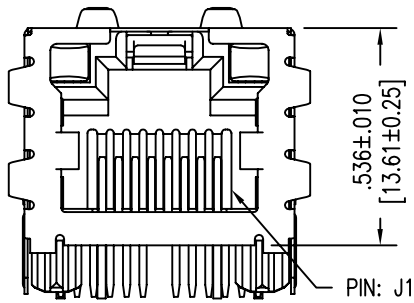
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NOTES:

- 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.
- THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE  
 USER THE ABILITY TO HAVE REASONABLE JACK/PANEL  
 CLEARANCES, YET MAINTAIN GROUNDING CAPABILITY.
- HIGH TEMPERATURE REFLOW COMPATABLE - 230°C/90 SEC MAX.



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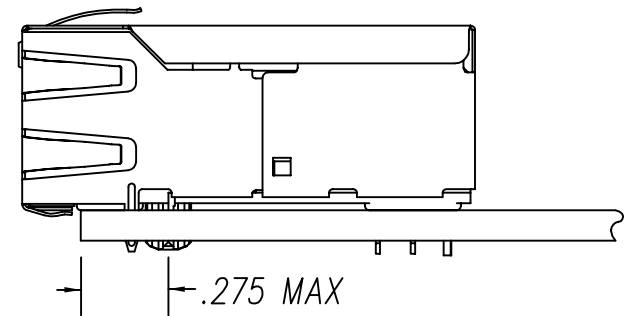
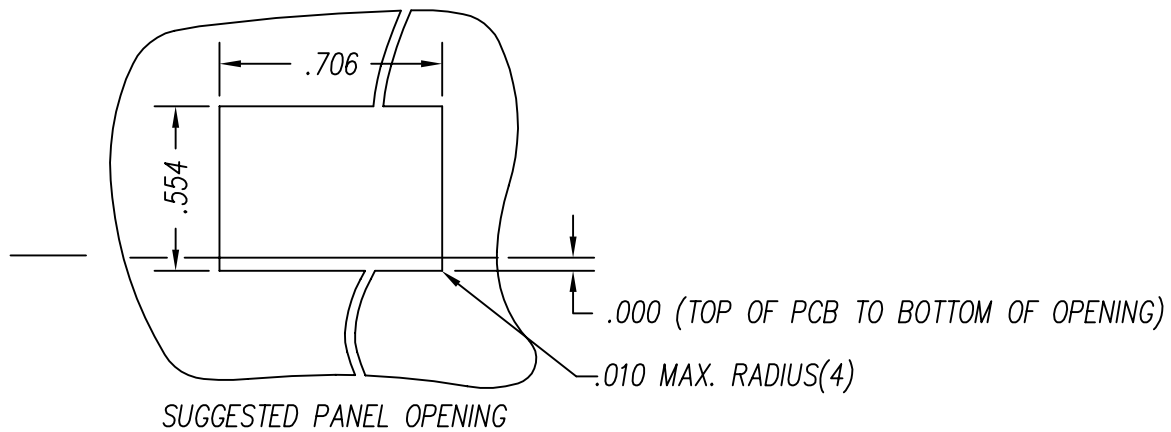
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THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE THE USER THE ABILITY TO HAVE REASONABLE JACK / PANEL CLEARANCES YET MAINTAIN RELIABLE GROUNDING CAPABILITY.

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