

NOTES

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

ELECTRICAL SPECIFICATIONS:

- | | | | |
|-----|---------------------------|------------------------------|--|
| 1.0 | Turns Ratio: | (P2-P3-P1) : (J3-J6) | : 1CT : 1CT $\pm 3\%$ |
| | | (P8-P6-P7) : (J1-J2) | : 1CT : 1CT $\pm 3\%$ |
| 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: | P1-P2 (WITH J6 AND J3 SHORT) | : 0.3uH MAX. @ 1MHz |
| | | P7-P8 (WITH J2 AND J1 SHORT) | : 0.3uH MAX. @ 1MHz |
| 4.0 | Interwinding Capacitance: | (P1,P3,P2) TO (J6,J3) | : 35pf MAX @ 1MHz |
| | | (P8,P6,P7) TO (J2,J1) | : 35pf MAX @ 1MHz |
| 5.0 | DC Resistance: | (J6-J3)=(J2-J1) | : 1.4 ohms Max. |

Bel Stewart Connector
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Glen Rock, Pa 17327-9199
717.234.7512

MagJack

<http://www.stewartconnector.com>

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DRAWING NO.

SI-50165

REV.
04

RECEIVE

6.0 RETURN LOSS: (P7-P8)=100 OHMS AND (J6-J3) =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 (P7, P8) : 1500 VAC
(J3, J6) TO (P1,P2) : 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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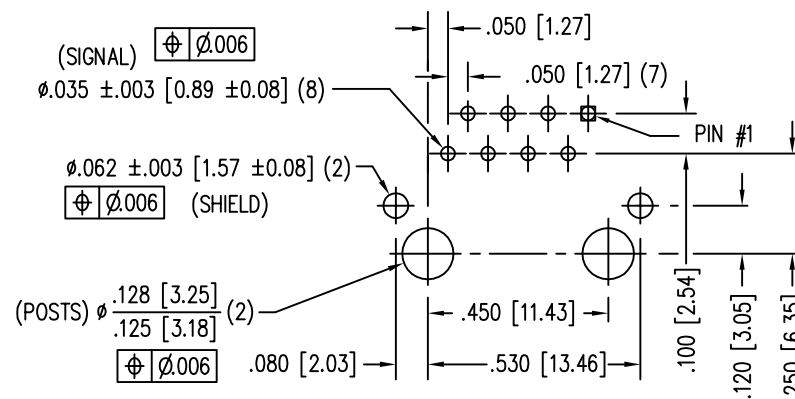
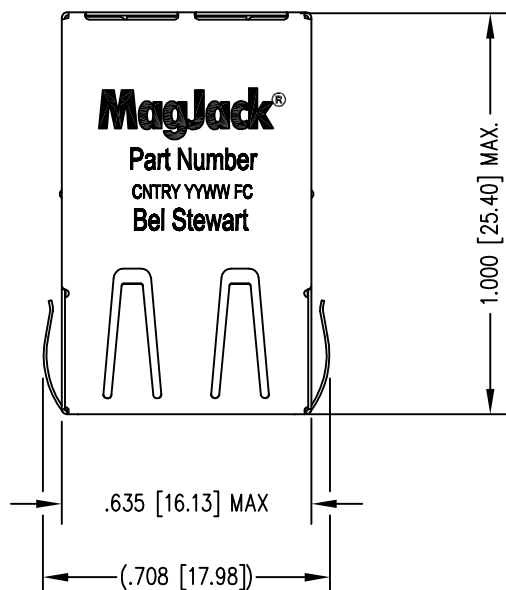
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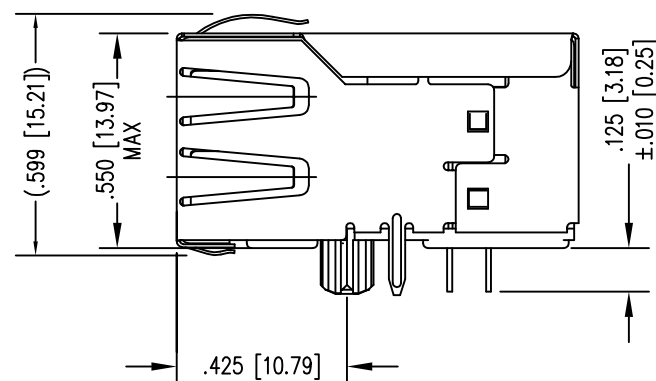
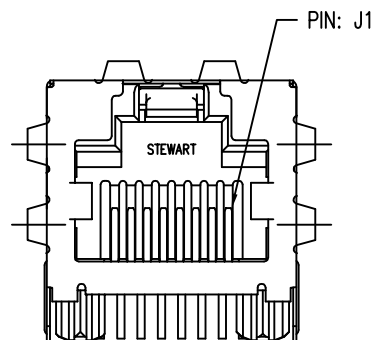


P.C.B. RECOMMENDED HOLE LAYOUT
SEEN FROM COMPONENT SIDE

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.
- ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE ± 0.005 [0.13]
- WAVE SOLDER COMPATIBLE - PREHEAT 125°C/90SECS.
HIGH TEMPERATURE REFLOW COMPATIBLE - 230°C/90 SEC MAX.



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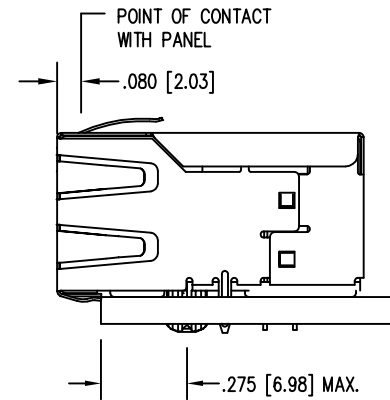
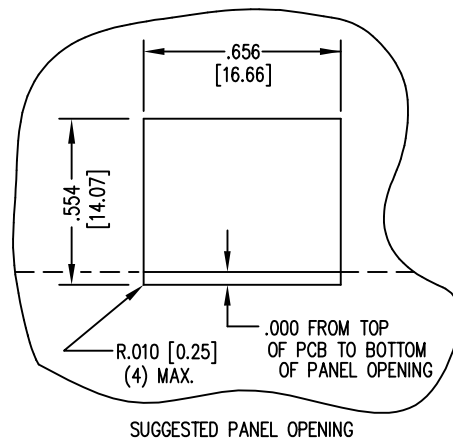
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1. THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE THE USER THE ABILITY TO HAVE REASONABLE JACK / PANEL CLEARANCES YET MAINTAIN RELIABLE GROUNDING CAPABILITY.
2. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE ± 0.005 [0.13]

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