

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: $(J_6 - J_3) = (J_2 - J_1)$: 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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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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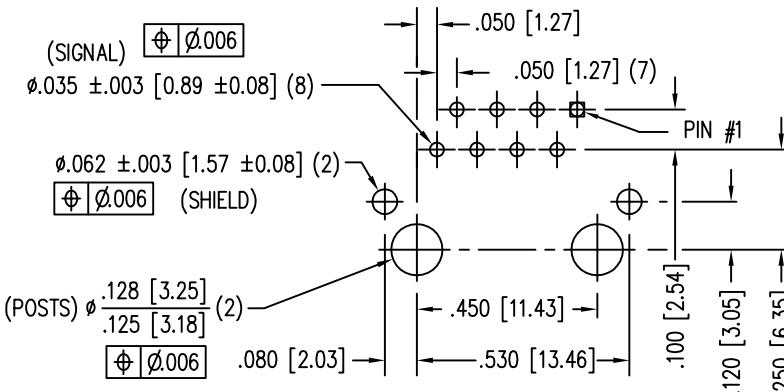
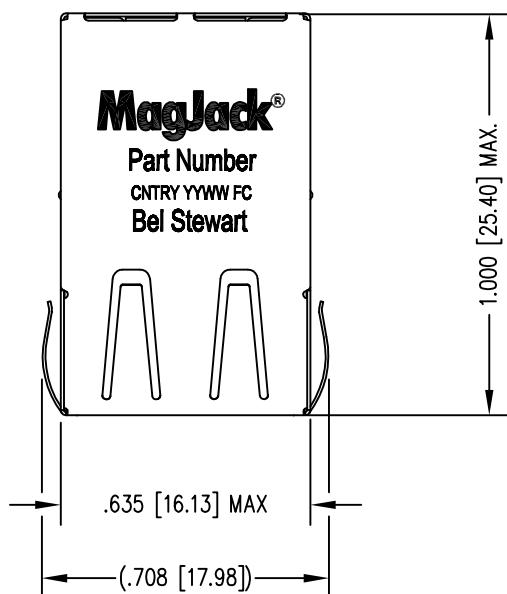
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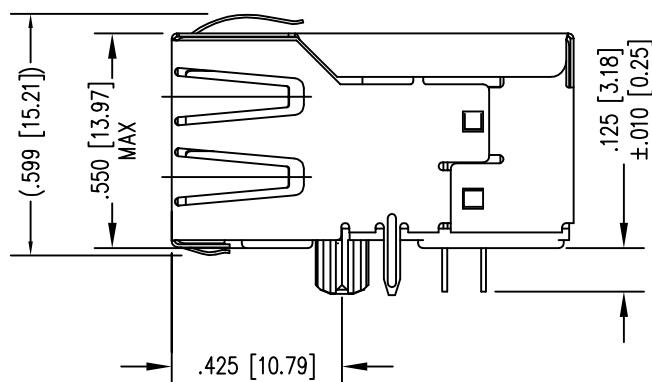
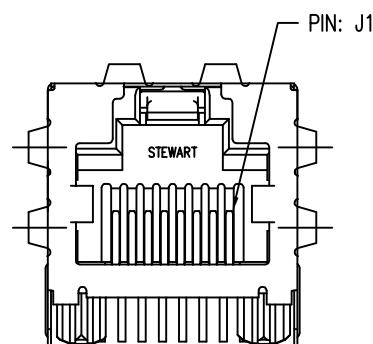
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P.C.B. RECOMMENDED HOLE LAYOUT
SEEN FROM COMPONENT SIDE

ALL CENTERLINE DIMENSIONS ARE BASIC.



NOTES:

1. 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.
2. PIN NOT ELECTRICALLY CONNECTED MAYBE OMITTED.
SEE ELECTRICAL DRAWING FOR OMITTED PINS.
3. TOLERANCES COMPLY WITH F.C.C. DIMENSION REQUIREMENTS.
4. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE $\pm .005$ [0.13]
5. WAVE SOLDER COMPATIBLE – PREHEAT 125°C/90SECS.
HIGH TEMPERATURE REFLOW COMPATABLE – 230°C/90 SEC MAX.

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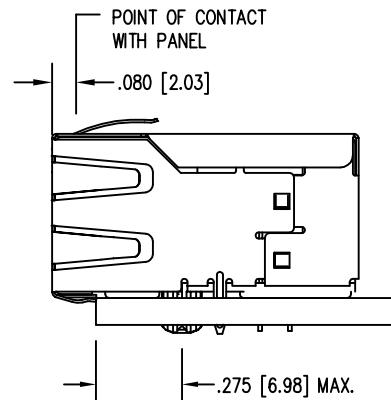
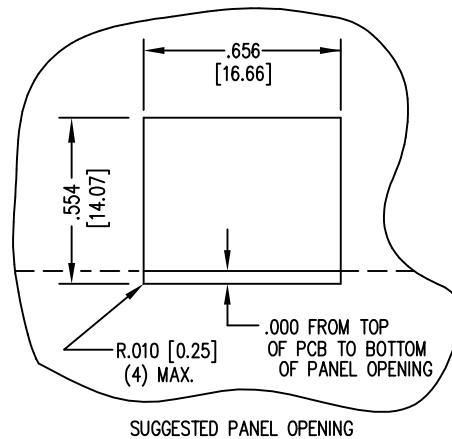
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1. THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE THE USER THE ABILITY TO HAVE REASONABLE JACK / PANEL CLEARANCES YET MAINTAIN RELIABLE GROUNDING CAPABILITY.
2. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE $\pm .005$ [0.13]

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