

NOTES

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

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

ELECTRICAL SPECIFICATIONS:

1.0 TURNS RATIO: $(P7-P6-P8) : (J3-J6)$: $1CT : 1CT \pm 3\%$
 $(P1-P3-P2) : (J1-J2)$: $1CT : 1CT \pm 3\%$

2.0 INDUCTANCE: $(P7-P8)$: $350\mu H$ MIN. @ 0.1V, 100KHz, 8mA DC Bias
 $(P1-P2)$: $350\mu H$ MIN. @ 0.1V, 100KHz, 8mA DC Bias

3.0 LEAKAGE INDUCTANCE: $P7-P8$ (WITH J6 AND J3 SHORT) : $0.3\mu H$ MAX. @ 1MHz
 $P1-P2$ (WITH J2 AND J1 SHORT) : $0.3\mu H$ MAX. @ 1MHz

4.0 INTERWINDING CAPACITANCE: $(P7,P6,P8)$ TO $(J6,J3)$: $30pf$ TYP @ 1MHz
 $(P1,P3,P2)$ TO $(J2,J1)$: $30pf$ TYP @ 1MHz

5.0 DC RESISTANCE: $(J6-J3)=(J2-J1)$: 1.4 ohms Max.

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: (P7-P8)=100 OHMS AND (P1-P2) =100 OHM REF.

1MHz TO 30MHz

30MHz TO 60MHz

60MHz TO 80MHz

: -18dB MIN.

: -(19-20 LOG (f/30MHz))

: 12dB MIN.

NOTE: 100 OHMS CONNECTED TO (J2-J1) OR (J6-J3).

7.0 DIELECTRIC WITHSTAND: (J3, J6) TO (P7, P8)
(J1, J2) TO (P1,P2)

: 1500 VAC

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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
PULSE WIDTH= 112nS

: 3.0 nS MAX

: 3.0 nS MAX

10.0 CROSS TALK: 1-65MHz

: -35 dB MIN

11.0 COMMON TO COMMON MODE ATTENUATION: 30MHz TO 100MHz
100MHz TO 130MHz

: -30dB MAX

: -20dB MAX

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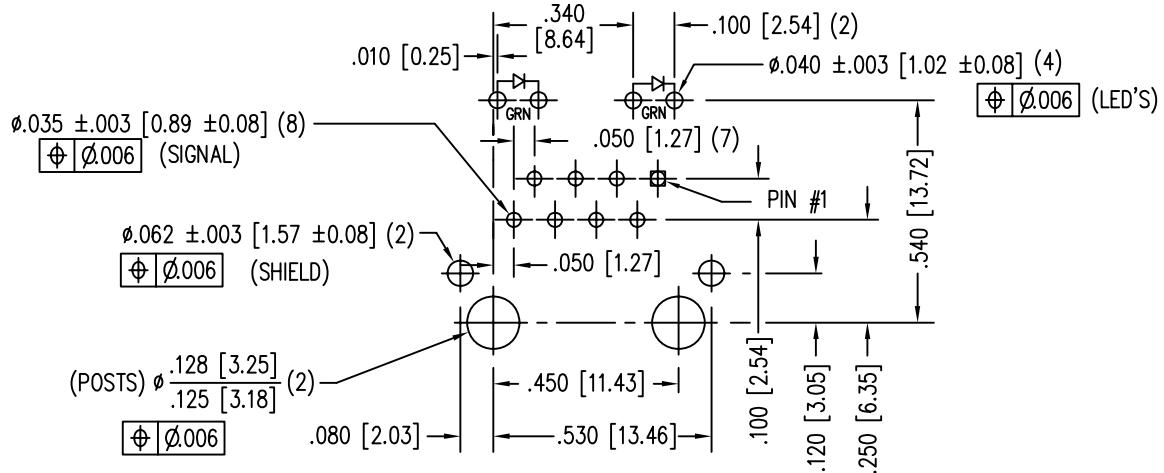
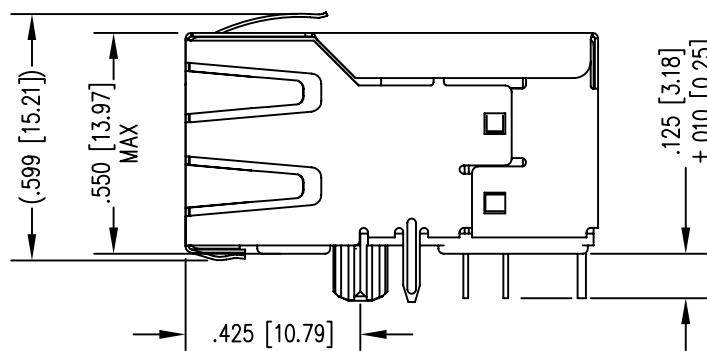
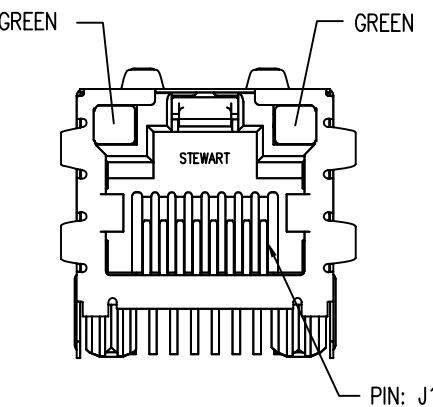
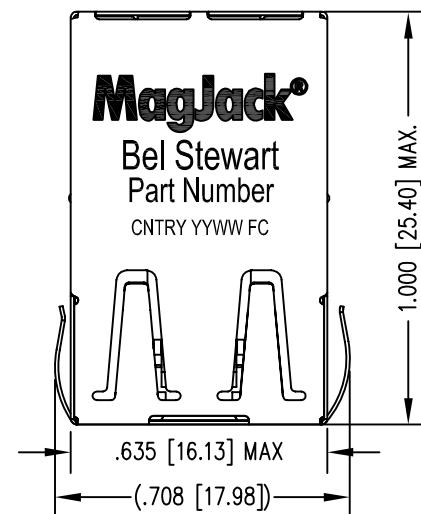
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SHEET 2 OF 4

DRAWING NO.

SI-50164 03



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 ±.005 [0.13]
5. WAVE SOLDER COMPATIBLE – PREHEAT 125°C/90SECS.
HIGH TEMPERATURE REFLOW COMPATABLE – 230°C/90 SEC MAX.

LED SPECIFICATION			
STANDARD LED	WAVELENGTH	Forward V (MAX)	* (TYP)
GREEN	565 nm	2.5 V	2.2 V

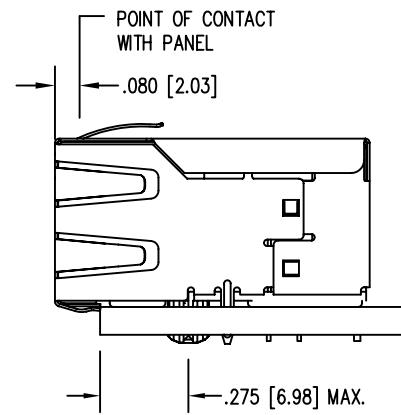
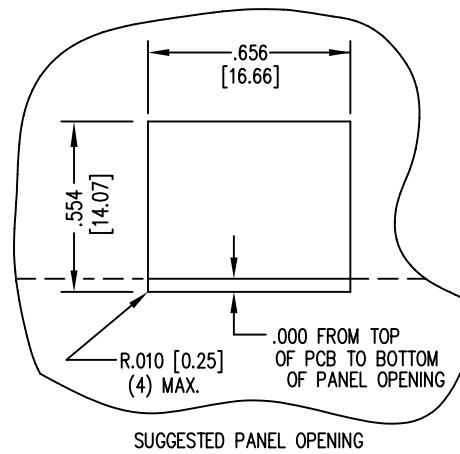
*WITH A FORWARD CURRENT OF 20 mA (TYP)

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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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