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RoHS  
2002/95/EC



**ELECTRICAL CHARACTERISTICS @ 25°C**

1.0 INDUCTANCE:  
 (P2-P3) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS  
 (P4-P5) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS  
 (P7-P8) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS  
 (P9-P10) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS

2.0 TURNS RATIO:  
 (P2-P3):(J1-J2) : 1CT : 1CT ± 2%  
 (P4-P5):(J3-J6) : 1CT : 1CT ± 2%  
 (P7-P8):(J4-J5) : 1CT : 1CT ± 2%  
 (P9-P10):(J7-J8) : 1CT : 1CT ± 2%

3.0 RETURN LOSS: 100 OHM REF.  
 500kHz TO 40MHz : -18dB MIN.  
 40MHz TO 100MHz : -12+20LOG(f/80MHz) MIN.

4.0 INSERTION LOSS: RS=RL=100 OHMS  
 100kHz TO 100MHz : -1.2dB MAX.

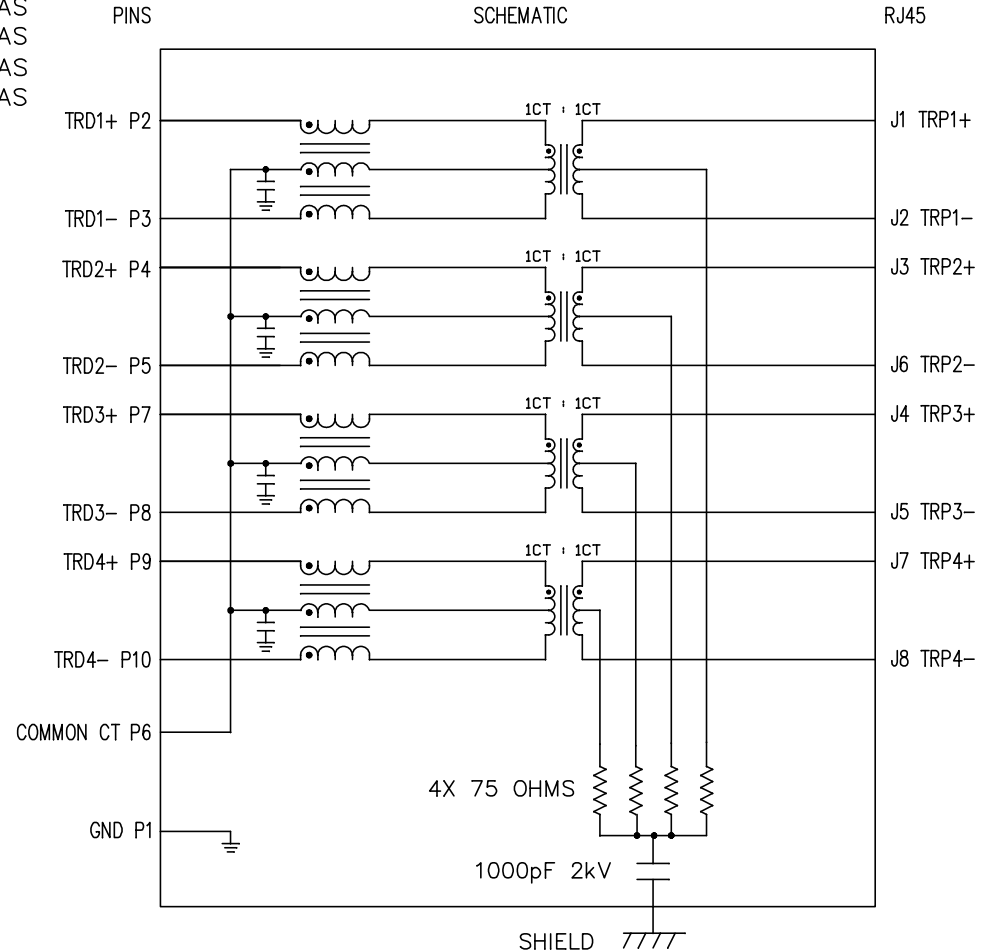
5.0 CROSS TALK: Ch1-Ch2, Ch1-Ch3, Ch1-Ch4, Ch2-Ch3, Ch2-Ch4, Ch3-Ch4  
 1MHz TO 30MHz : -35dB MIN.  
 30MHz TO 80MHz : -24dB MIN.  
 80MHz TO 100MHz : -25dB MIN.

6.0 CM TO CM REJECTION:  
 100kHz TO 100MHz : -30dB MIN.

7.0 CM TO DM REJECTION:  
 100kHz TO 100MHz : -35dB MIN.

8.0 VOLTAGE WITHSTAND:  
 (J1,J2) TO (P2,P3) : 1500Vrms  
 (J3,J6) TO (P4,P5) : 1500Vrms  
 (J4,J5) TO (P7,P8) : 1500Vrms  
 (J7,J8) TO (P9,P10) : 1500Vrms

9.0 THIS COMPONENT IS A PATENT PRODUCT;US PATENT NUMBER 7,123,117.



|                |            |
|----------------|------------|
| ORIGINATED BY  | DATE       |
| Zeng Xiao Chun | 03-23-2011 |
| DRAWN BY       | DATE       |
| Zhang Ru Sheng | 03-23-2011 |

|       |   |
|-------|---|
| TITLE | <b>MagJack®</b><br>10/100/1000BT<br>TAB UP SHIELDED<br>PATENTED |
|-------|---|

|                        |                |
|------------------------|----------------|
| PART NO. / DRAWING NO. | SI-51005-F     |
| FILE NAME              | SI-51005-F.DWG |

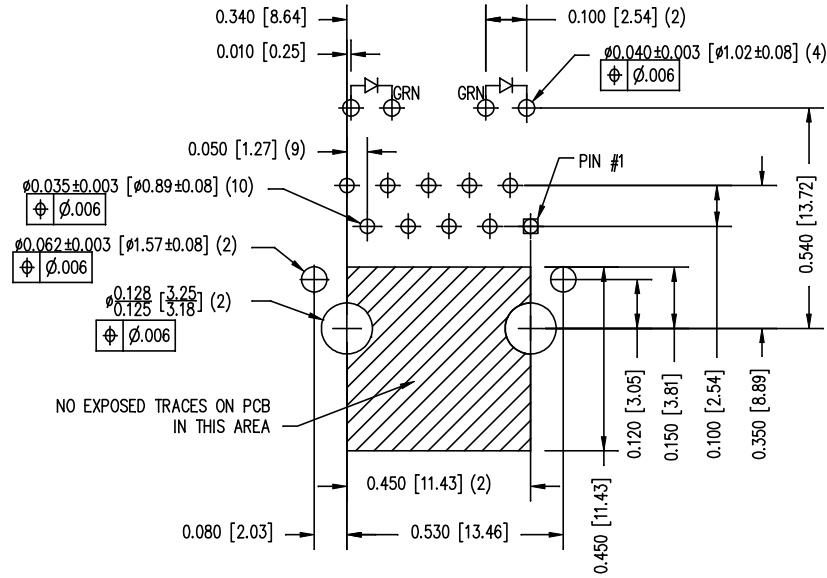
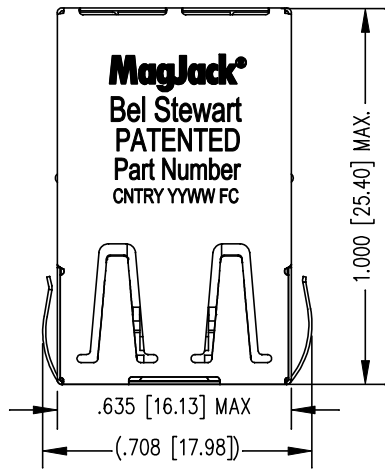
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| .XXX          | PAGE : 2                     |
| ±0.005        |                              |

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| REV. : A2 |
| SIZE : A4 |
| PAGE : 2  |

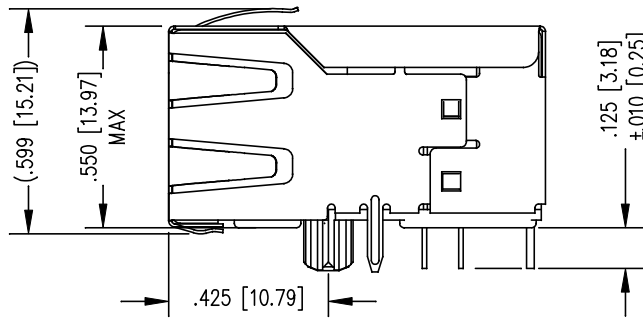
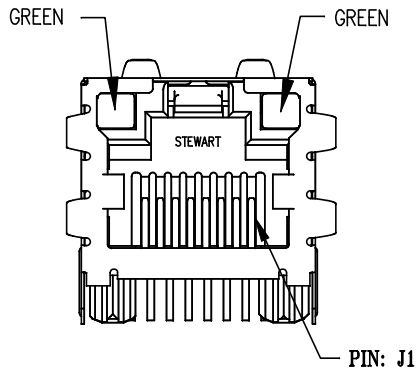


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P.C.B. RECOMMENDED HOLE LAYOUT  
SEEN FROM COMPONENT SIDE  
ALL CENTERLINE DIMENSIONS ARE BASIC



| 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)

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 ±.005 [0.13]
- REFLOW AND WAVE SOLDER COMPATIBLE -260°C FOR 10 SECONDS MAX.

|                |            |
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| Zeng Xiao Chun | 03-23-2011 |
| DRAWN BY       | DATE       |
| Zhang Ru Sheng | 03-23-2011 |

|       |  |
|-------|--|
| TITLE | <b>MagJack®</b><br>100/100/1000BT<br>TAB UP SHIELDED<br>PATENTED |
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| FILE NAME              | SI-51005-F.DWG |

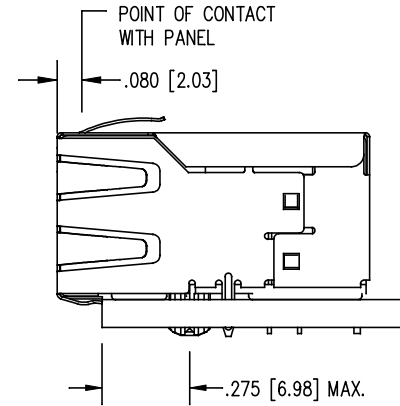
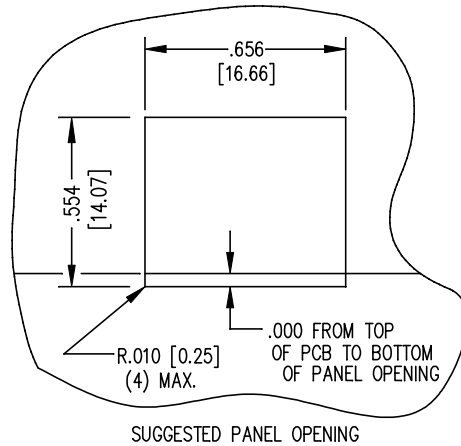
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| STANDARD DIM. | [ ] METRIC DIM. AS REFERENCE |
| TOL. IN INCH  | UNIT : INCH [mm]             |
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| ±0.005        | PAGE : 3                     |

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| SIZE : A4        | PAGE : 3  |



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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  $\pm 0.005$  [0.13]

|                |            |  |                        |               |                              |           |
|----------------|------------|--|------------------------|---------------|------------------------------|-----------|
| ORIGINATED BY  | DATE       | TITLE  | PART NO. / DRAWING NO. | STANDARD DIM. | [ ] METRIC DIM. AS REFERENCE |           |
| Zeng Xiao Chun | 03-23-2011 | <b>MagJack®</b><br>100/100/1000BT<br>TAB UP SHIELDED<br>PATENTED | SI-51005-F             | TOL. IN INCH  | UNIT : INCH [mm]             | REV. : A2 |
| DRAWN BY       | DATE       |  | FILE NAME              | .X            | SCALE : N/A                  | SIZE : A4 |
| Zhang Ru Sheng | 03-23-2011 |  | SI-51005-F.DWG         | .XX           |                              | PAGE : 4  |
|                |            |  |                        | .XXX          | $\pm 0.005$                  |           |

