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**PATENTED:**  
**THIS PRODUCT IS**  
**COVERED BY U.S.**  
**PATENT 5,736,910**



**DOCUMENT / PART NO.: SI-62003-F**

**TITLE : 10/100BT , SHIELDED**

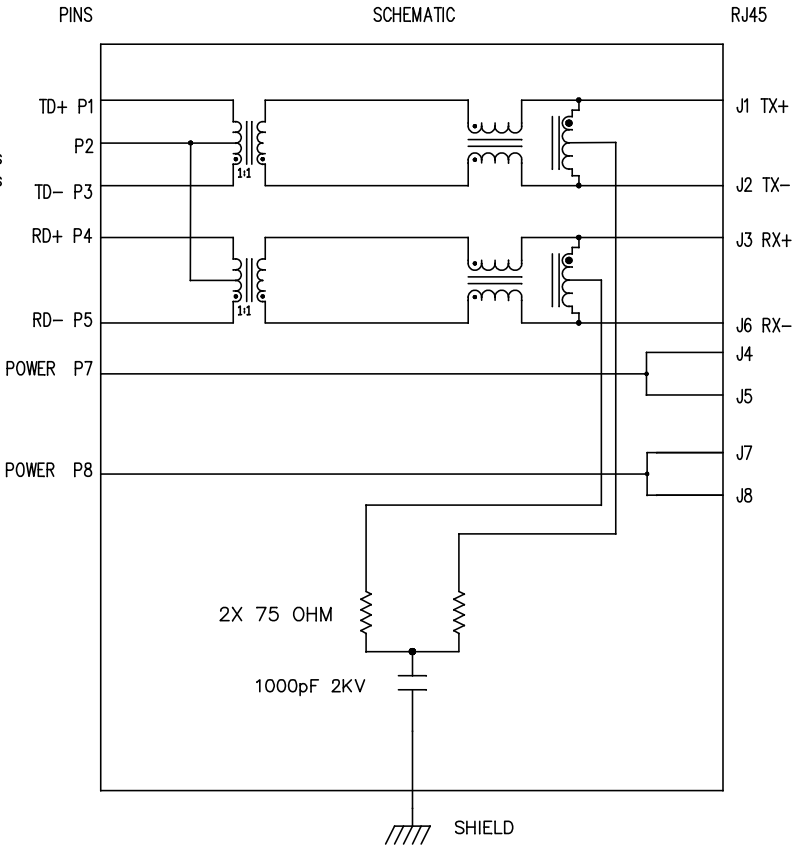
| ISSUE | DESCRIPTION OF CHANGE                                                   |  |  |  |  |  |  |  | REVIEWED BY |  |  |  | APPROVED BY  |  |  |  | ECN#  |  |
|-------|-------------------------------------------------------------------------|--|--|--|--|--|--|--|-------------|--|--|--|--------------|--|--|--|-------|--|
| A0    | Change the mechanical drawing and use new format and production release |  |  |  |  |  |  |  | Bain Liu    |  |  |  | Steve Weller |  |  |  | 06380 |  |
|       |                                                                         |  |  |  |  |  |  |  |             |  |  |  |              |  |  |  |       |  |
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ELECTRICAL SPECIFICATIONS:

|                                                       |                                          |
|-------------------------------------------------------|------------------------------------------|
| CURRENT CAPABILITY:                                   | : 350 mA                                 |
| 1.0 TURNS RATIO: (P5-P2-P4) : (J6-J3)                 | : 1CT : 1 ±3%                            |
| (P3-P2-P1) : (J2-J1)                                  | : 1CT : 1 ±3%                            |
| 2.0 INDUCTANCE: (P5-P4)                               | : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias |
| (P3-P1)                                               | : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias |
| 3.0 LEAKAGE INDUCTANCE: P5-P4 (WITH J6 AND J3 SHORT)  | : 0.3uH MAX. @ 1MHz                      |
| P3-P1 (WITH J2 AND J1 SHORT)                          | : 0.3uH MAX. @ 1MHz                      |
| 4.0 INTERWINDING CAPACITANCE: (P5,P2,P4) TO (J6,J3)   | : 40pF MAX @ 1MHz                        |
| (P3,P2,P1) TO (J2,J1)                                 | : 40pF MAX @ 1MHz                        |
| 5.0 DC RESISTANCE: (J1-J2)                            | : 1.2 ohms Max.                          |
| (J3-J6)                                               | : 1.2 ohms Max.                          |
| 6.0 RETURN LOSS: 1MHz TO 30MHz                        | : 18dB MIN.                              |
| 60MHz TO 80MHz                                        | : 12dB MIN.                              |
| 7.0 DIELECTRIC WITHSTAND: (J1, J2) TO (P1, P3)        | : 1500 VAC                               |
| (J3, J6) TO (P4, P5)                                  | : 1500 VAC                               |
| 8.0 INSERTION LOSS: 100KHz TO 100MHz                  | : 1.1 dB TYP                             |
| 9.0 RISE TIME: OUTPUT VOLTAGE = 1 V peak              | : 3.0 nS MAX                             |
| PULSE WIDTH= 112nS                                    | : 3.0 nS MAX                             |
| 10.0 CROSS TALK: 1MHz TO 100MHz                       | : 35 dB TYP                              |
| 11.0 COMMON TO COMMON MODE ATTENUATION:1MHz TO 100MHz | : 35 dB TYP                              |



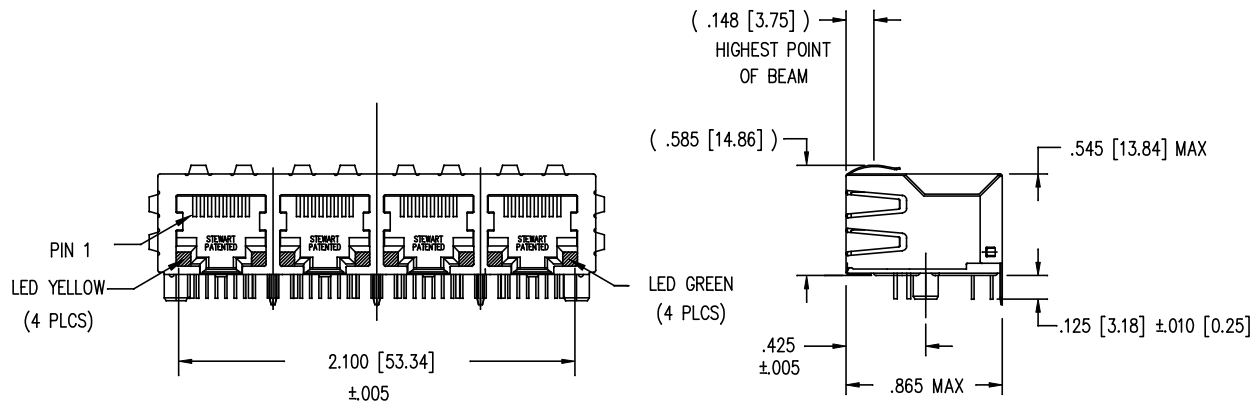
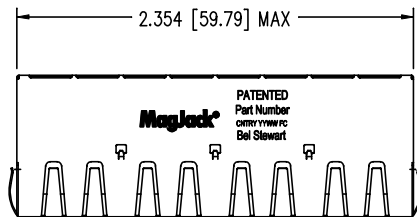
NOTES 1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

|               |            |                                             |                        |               |                              |           |
|---------------|------------|---------------------------------------------|------------------------|---------------|------------------------------|-----------|
| ORIGINATED BY | DATE       | TITLE                                       | PART NO. / DRAWING NO. | STANDARD DIM. | [ ] METRIC DIM. AS REFERENCE |           |
| Zeng Xiaochun | 2011-12-08 | MagJack®<br>10/100BT , SHIELDED<br>PATENTED | SI-62003-F             | TOL. IN INCH  | UNIT : INCH [mm]             | REV. : A0 |
| DRAWN BY      | DATE       |                                             | FILE NAME              | .X            | SCALE : N/A                  | SIZE : A4 |
| Duan Jun      | 2011-12-08 |                                             | SI-62003-F.DWG         | .XX           |                              | PAGE : 2  |
|               |            |                                             |                        | .XXX          |                              |           |



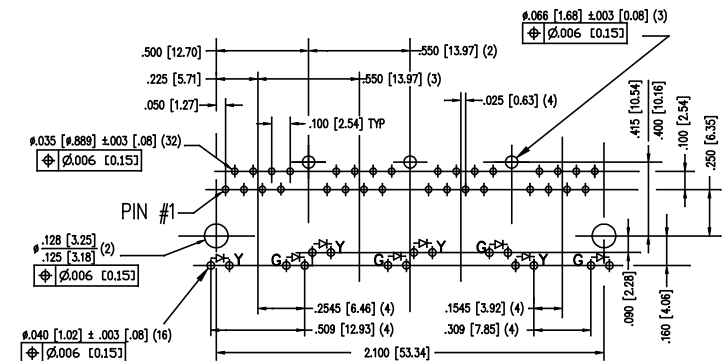
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| LED SPECIFICATIONS |                       |                         |            |
|--------------------|-----------------------|-------------------------|------------|
| STANDARD LED       | FORWARD VOLTAGE (MAX) | * FORWARD VOLTAGE (TYP) | WAVELENGTH |
| YELLOW             | 2.5 V                 | 2.1 V                   | 590 nm     |
| GREEN              | 2.6 V                 | 2.25 V                  | 555 nm     |

\* WITH A FORWARD CURRENT OF 20 mA (TYP)



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

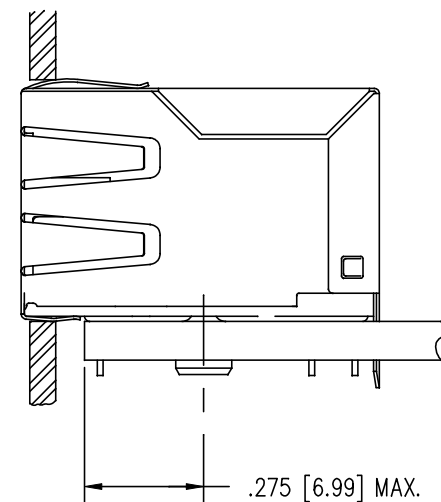
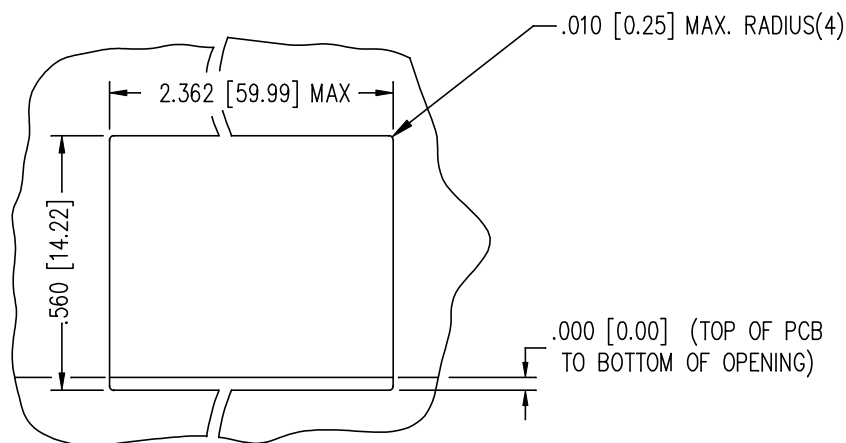
NOTES:

- CONNECTOR MATERIALS:  
HOUSING: THERMOPLASTIC UL94 V--0  
CONTACT/SHIELD: COPPER ALLOY  
SHIELD PLATING: NICKEL OR TIN  
CONTACT PLATING: 50 MICRO-INCH SELECTIVE HARD GOLD PLATING OR EQUIVALENT 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.

|               |            |                                                                                 |                        |               |        |                                                                                       |           |                                                                     |
|---------------|------------|---------------------------------------------------------------------------------|------------------------|---------------|--------|---------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------|
| ORIGINATED BY | DATE       | TITLE<br><div>MagJack®</div> <div>10/100BT , SHIELDED</div> <div>PATENTED</div> | PART NO. / DRAWING NO. | STANDARD DIM. |        | [ ] METRIC DIM. AS REFERENCE                                                          |           | <div>bel</div> <div>COMPONENTS FOR A<br/>CONNECTED<br/>PLANET</div> |
| Zeng Xiaochun | 2011-12-08 |                                                                                 | SI-62003-F             | TOL. IN INCH  |        | UNIT : INCH [mm]                                                                      | REV. : A0 |                                                                     |
| DRAWN BY      | DATE       |                                                                                 | FILE NAME              | .X            |        | SCALE : N/A                                                                           | SIZE : A4 |                                                                     |
| Duan Jun      | 2011-12-08 |                                                                                 | SI-62003-F.DWG         | .XX           |        |  | PAGE : 3  |                                                                     |
|               |            |                                                                                 |                        | .XXX          | ±0.005 |                                                                                       |           |                                                                     |

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# NOTES:

1. THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE USER THE ABILITY TO HAVE REASONABLE JACK/PANEL CLEARANCES, YET MAINTAIN GROUNDING CAPABILITY. THESE VARIABLES CAN BE ADJUSTED IN EITHER DIRECTION BUT MAY CARRY SOME CONSEQUENCES IN THE FORM OF LOWER MATING FORCES OR TIGHTER ASSEMBLY TOLERANCES.
2. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE  $\pm 0.005$  [0.13]

|               |            |                                                                                  |                        |                                                                |                                     |           |
|---------------|------------|----------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------|-------------------------------------|-----------|
| ORIGINATED BY | DATE       | <b>TITLE</b><br><b>MagJack®</b><br><b>10/100BT , SHIELDED</b><br><b>PATENTED</b> | PART NO. / DRAWING NO. | <b>STANDARD DIM.</b><br><b>TOL. IN INCH</b>                    | <b>[ ] METRIC DIM. AS REFERENCE</b> |           |
| Zeng Xiaochun | 2011-12-08 |                                                                                  | SI-62003-F             |                                                                | UNIT : INCH [mm]                    | REV. : A0 |
| DRAWN BY      | DATE       |                                                                                  | FILE NAME              |                                                                | SCALE : N/A                         | SIZE : A4 |
| Duan Jun      | 2011-12-08 |                                                                                  | SI-62003-F.DWG         | <div>.X</div> <div>.XX</div> <div>.XXX</div> <div>±0.005</div> |                                     | PAGE : 4  |

