

THE INFORMATION CONTAINED HEREIN IS CONSIDERED  
'PROPRIETARY' TO BEL FUSE INC. AND SHALL NOT BE  
COPIED, REPRODUCED OR DISCLOSED WITHOUT THE  
WRITTEN APPROVAL OF BEL FUSE INC.

| LED1 POLARITY |       |        | LED2 POLARITY |        |       |
|---------------|-------|--------|---------------|--------|-------|
| PIN 7         | PIN 8 | COLOR  | PIN 9         | PIN 10 | COLOR |
| -             | +     | YELLOW | -             | +      | GREEN |

RoHS



### ELECTRICAL CHARACTERISTICS @ 25°C

#### URNS RATIO

|                       |                       |
|-----------------------|-----------------------|
| TX                    | 1CT : 1               |
| RX                    | 1CT : 1               |
| □CL @ 100kHz/100mVRMS | 350μH MIN.            |
| 8mA DC BIAS           |                       |
| INS. LOSS             | -1.0 dB MAX           |
| 1MHz TO 100MHz        |                       |
| RET. LOSS (MIN)       | -18 dB                |
| 1MHz-30MHz            | -18+20LOG(F/30MHz) dB |
| 30MHz-60MHz           | -12 dB                |
| 60MHz-80MHz           |                       |

#### CROSS TALK (TX - RX)

|             |            |
|-------------|------------|
| 500kHz-1MHz | -70 dB MIN |
| 10 MHz      | -50 dB MIN |
| 30 MHz      | -45 dB MIN |
| 50 MHz      | -40 dB MIN |
| 100 MHz     | -35 dB MIN |

#### CM TO CM REJ

|             |            |
|-------------|------------|
| 100kHz-1MHz | -70 dB MIN |
| 10 MHz      | -47 dB MIN |
| 30 MHz      | -42 dB MIN |
| 60 MHz      | -37 dB MIN |
| 100 MHz     | -30 dB MIN |

#### CM TO DM REJ

|             |            |
|-------------|------------|
| 100kHz-1MHz | -70 dB MIN |
| 10 MHz      | -60 dB MIN |
| 30 MHz      | -50 dB MIN |
| 60 MHz      | -45 dB MIN |
| 100 MHz     | -40 dB MIN |

HIPOT (Isolation Voltage): 1500 Vrms

100% OF PRODUCTION TESTED TO COMPLY  
WITH IEEE 802.3 ISOLATION REQUIREMENTS

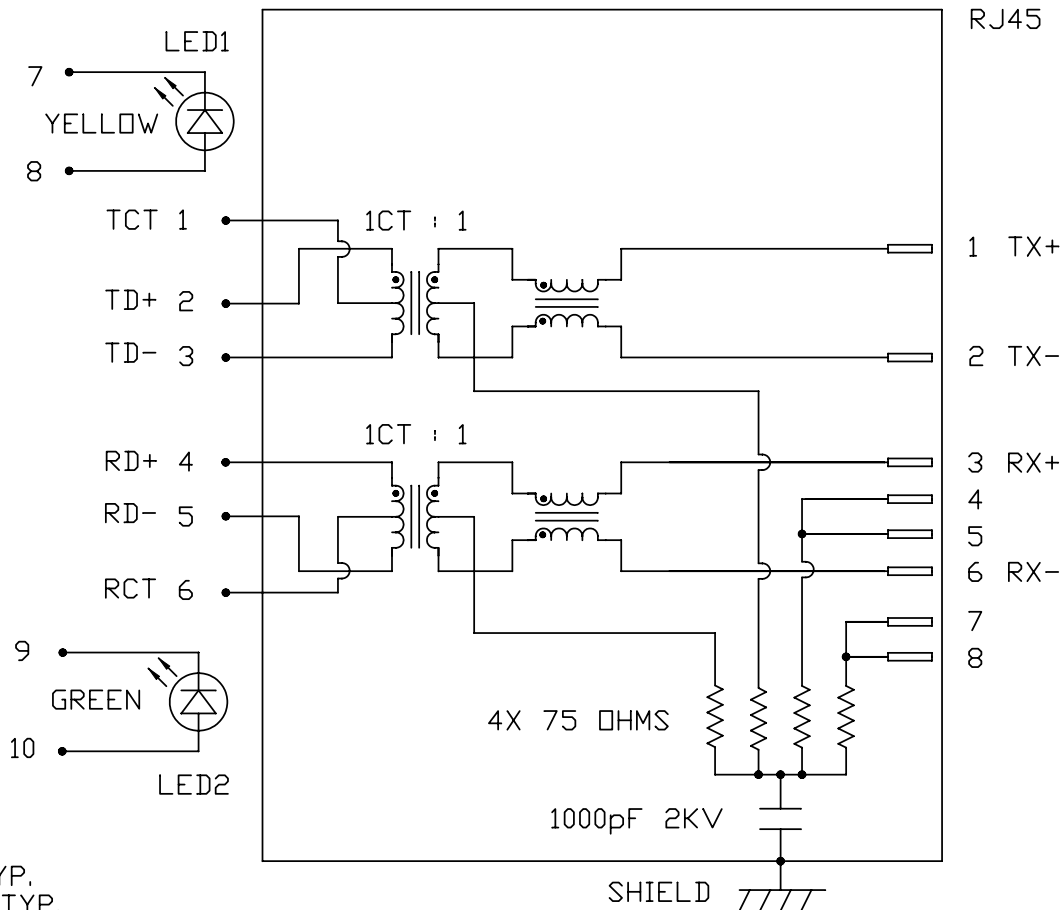
#### LED 1

|                          |                           |
|--------------------------|---------------------------|
| VF (FORWARD VOLTAGE)     | IF=20mA YELLOW 2.1V TYP.  |
| λD (DOMINANT WAVELENGTH) | IF=20mA YELLOW 590nm TYP. |

#### LED 2

|                          |                          |
|--------------------------|--------------------------|
| VF (FORWARD VOLTAGE)     | IF=20mA GREEN 2.2V TYP.  |
| λD (DOMINANT WAVELENGTH) | IF=20mA GREEN 565nm TYP. |

### SCHEMATIC



ORIGINATED BY DATE  
CHOW WANCHUNG 2012-08-05

DRAWN BY DATE  
TAN QIGUANG 2012-08-05

TITLE MagJack®  
(4 Cores, MDIX, CM Termination)

08B0-1A1T-06-F  
PATENTED

PART NO. / DRAWING NO.  
08B01A1T06-F

FILE NAME  
08B01A1T06-F\_B.DWG

STANDARD DIM.  
TOL. IN INCH

.X  
.XX  
.XXX

[ ] METRIC DIM. AS REFERENCE

UNIT : INCH [mm] REV. : B

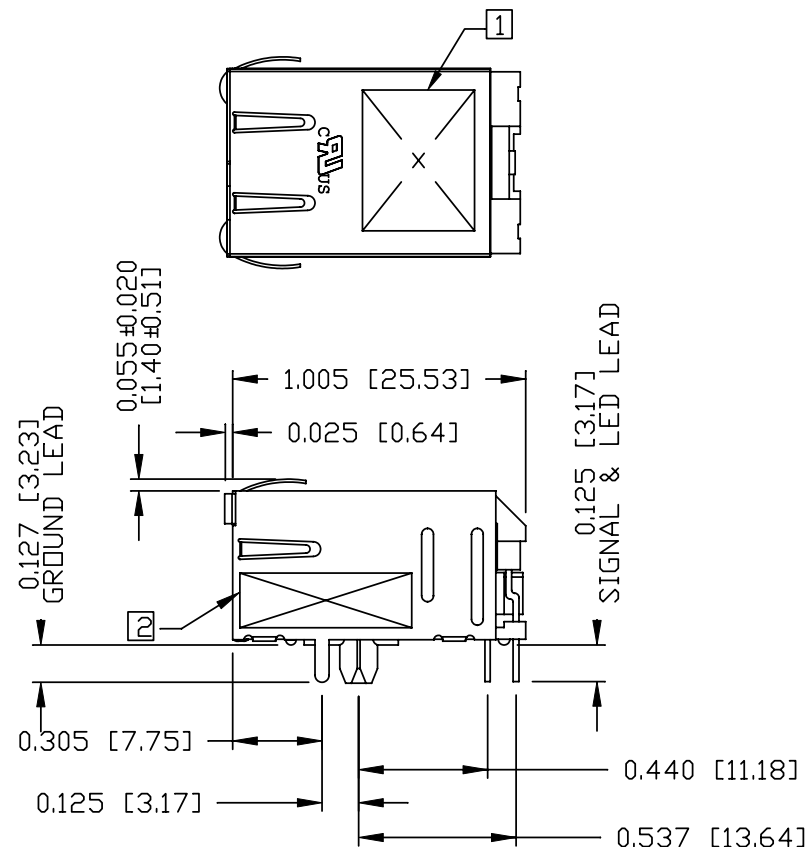
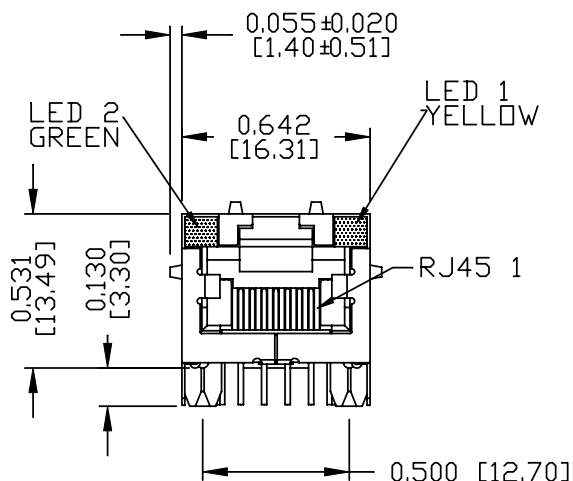
SCALE : N/A SIZE : A4

PAGE : 2

bel  
COMPONENTS FOR A  
CONNECTED  
PLANET

# MECHANICAL SPECIFICATION

RoHS



## NOTES:

PLASTIC HOUSING: THERMOPLASTIC PBT  
 FLAMMABILITY RATING UL 94V-0  
 CONTACTS PLATING: 15 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT.  
 PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.  
 METAL SHIELD: NICKEL PLATED ON COPPER ALLOY.

(ALL GROUND LEADS ARE SOLDER DIPPED)

① MARK PART WITH MFG LOGO, MFG NAME, PART NUMBER AND DATE CODE.

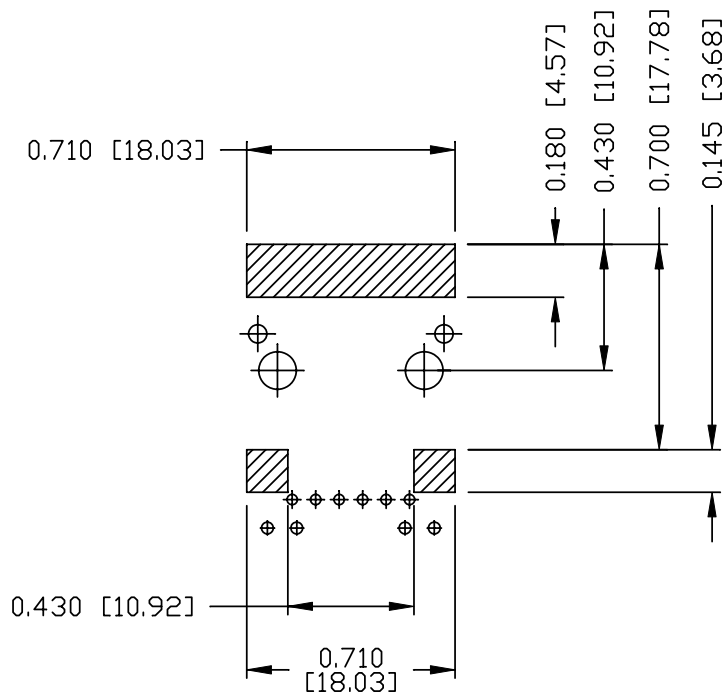
② "PATENTED" MARKING.

c  USUL RECOGNIZED - FILE #E196366 AND E169987.

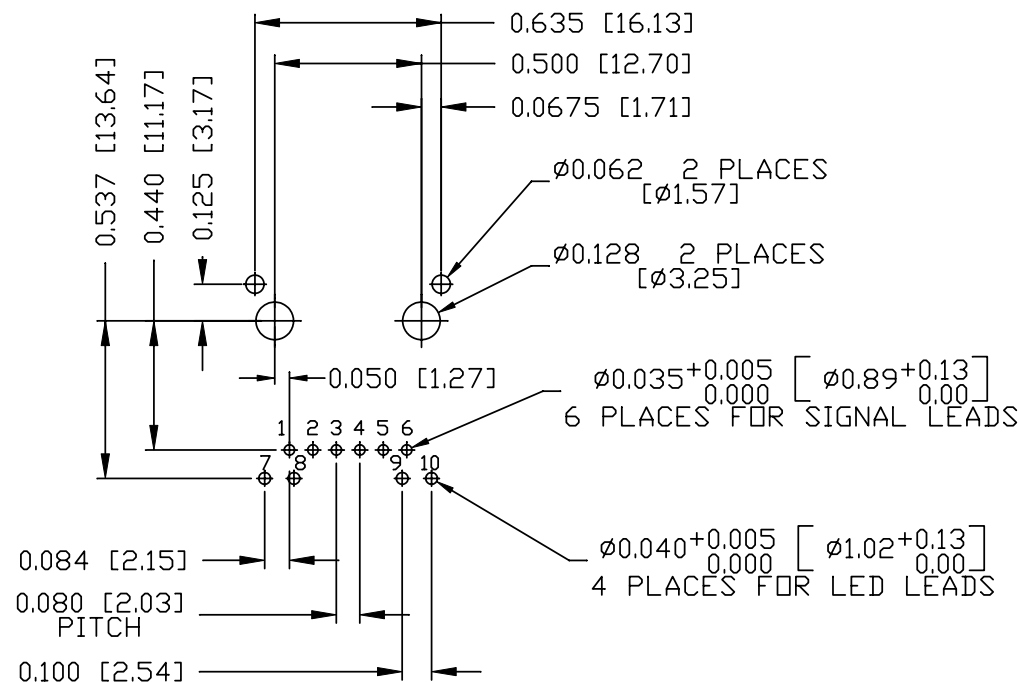
3. THE PRODUCT IS RoHS COMPLIANT.
4. JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.
5. THE PRODUCT IS PATENTED. THE PATENT NUMBER IS U.S. PAT. 5,736,910.

| ORIGINATED BY | DATE       | TITLE                                       | PART NO. / DRAWING NO. | STANDARD DIM. |        | [ ] METRIC DIM. AS REFERENCE |           |
|---------------|------------|---------------------------------------------|------------------------|---------------|--------|------------------------------|-----------|
|               |            |                                             |                        | TOL. IN INCH  |        | UNIT : INCH [mm]             | REV. : B  |
| ANTON LIAO    | 2012-08-05 | MagJack®<br>(4 Cores, MDIX, CM Termination) | 08B01A1T06-F           | .X            |        | SCALE : N/A                  | SIZE : A4 |
| DRAWN BY      | DATE       | 08B0-1A1T-06-F                              | FILE NAME              | .XX           |        |                              | PAGE : 3  |
| HE ZHEN       | 2012-08-05 | PATENTED                                    | 08B01A1T06-F_B.DWG     | .XXX          | ±0.010 |                              |           |





# RECOMMENDED PCB FOOTPRINT COMPONENT SIDE VIEW



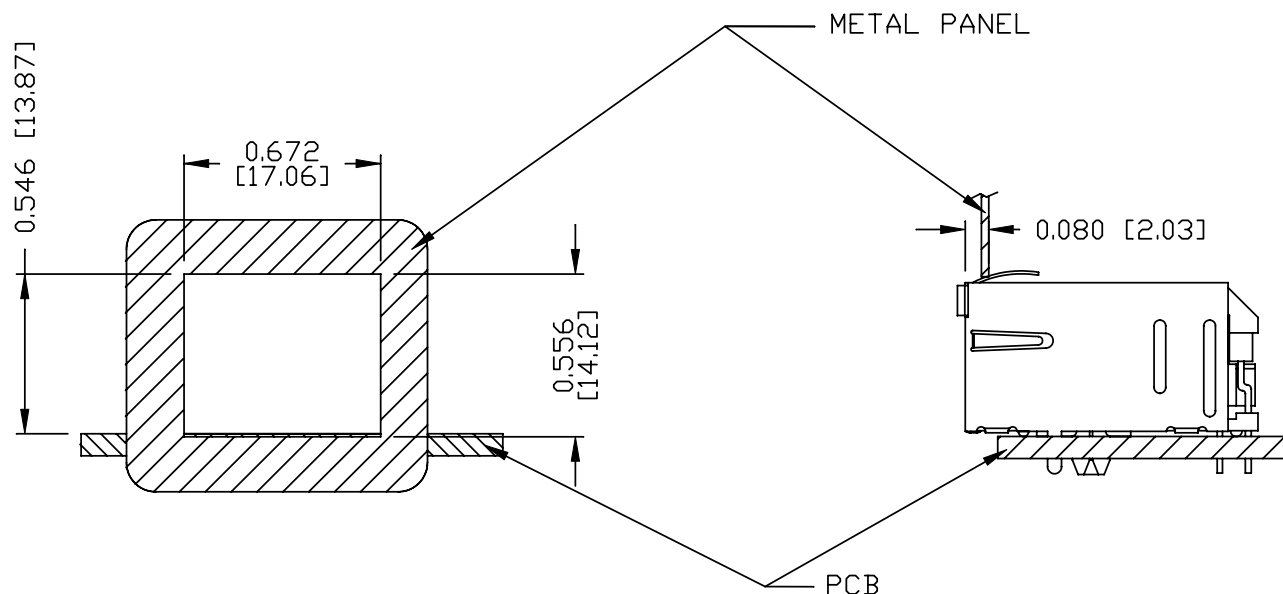
## NOTES:

THE SHADED AREA ON THE CUSTOMER BOARD ARE  
RECOMMENDED TO BE CLEAR OFF ANY VIA HOLE OR  
COMPONENT PAD.

|                             |                    |                                                      |                                        |                               |        |                              |           |
|-----------------------------|--------------------|------------------------------------------------------|----------------------------------------|-------------------------------|--------|------------------------------|-----------|
| ORIGINATED BY<br>ANTON LIAO | DATE<br>2012-08-05 | TITLE<br>MagJack®<br>(4 Cores, MDIX, CM Termination) | PART NO. / DRAWING NO.<br>08B01A1T06-F | STANDARD DIM.<br>TOL. IN INCH |        | [ ] METRIC DIM. AS REFERENCE |           |
|                             |                    |                                                      |                                        | .X                            |        | UNIT : INCH [mm]             | REV. : B  |
| DRAWN BY<br>HE ZHEN         | DATE<br>2012-08-05 | 08B0-1A1T-06-F<br>PATENTED                           | FILE NAME<br>08B01A1T06-F_B.DWG        | .XX                           |        | SCALE : N/A                  | SIZE : A4 |
|                             |                    |                                                      |                                        | .XXX                          | ±0.004 |                              | PAGE : 4  |



# SUGGESTED PANEL OPENING



## NOTE:

THE DISTANCE OF PANEL INSIDE SURFACE RELATIVE TO FRONT SURFACE OF PART IS ONLY A SUGGESTION. IN CASE THIS DISTANCE IS DIFFERENT, THE REQUIRED PANEL OPENING DIMENSIONS CHANGE ACCORDINGLY.

## PACKING INFORMATION

PACKING TRAY : 0200-9999-D4(TOP)

0200-9999-D5(BOTTOM)

PACKING QUANTITY : 60 PCS FINISHED GOODS PER TRAY

11 TRAYS (660 PCS FINISHED GOODS) PER CARTON BOX

NOTE : CARDBOARDS ARE PLACED BETWEEN LAYERS OF PACKING TRAY INSIDE CARTON BOX  
(INCLUDE THE UPPERMOST AND LOWERMOST TRAY)

| ORIGINATED BY | DATE       | TITLE                                                                     | PART NO. / DRAWING NO. | STANDARD DIM. |        | [ ] METRIC DIM. AS REFERENCE |           |
|---------------|------------|---------------------------------------------------------------------------|------------------------|---------------|--------|------------------------------|-----------|
|               |            |                                                                           |                        | TOL. IN INCH  |        | UNIT : INCH [mm]             | REV. : B  |
| ANTON LIAO    | 2012-08-05 | MagJack®<br>(4 Cores, MDIX, CM Termination)<br>08B0-1A1T-06-F<br>PATENTED | 08B01A1T06-F           | .X            |        | SCALE : N/A                  | SIZE : A4 |
| DRAWN BY      | DATE       |                                                                           |                        | .XX           |        |                              |           |
| HE ZHEN       | 2012-08-05 |                                                                           |                        | .XXX          | ±0.004 |                              | PAGE : 5  |

