

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  |
|               |       |        | +             | -      | ORANGE |

RoHS



## ELECTRICAL CHARACTERISTICS @ 25°C

### URNS RATIO

TX  
RX

1CT : 1  
1CT : 1

QCL @ 100kHz/100mVRMS  
8mA DC BIAS

350μH MIN.

### INS. LOSS

1MHz TO 100MHz

-1.0 dB MAX

### RET. LOSS (MIN)

1MHz-30MHz

-18 dB

30MHz-60MHz

-18+20LOG(F/30MHz) dB

60MHz-80MHz

-12 dB

### CROSS TALK (TX - RX)

500kHz-100MHz

-35 dB MIN

### CM TO CM REJ

100kHz-100MHz

-30 dB MIN

### CM TO DM REJ

100kHz-100MHz

-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 ORANGE 2.0V TYP.

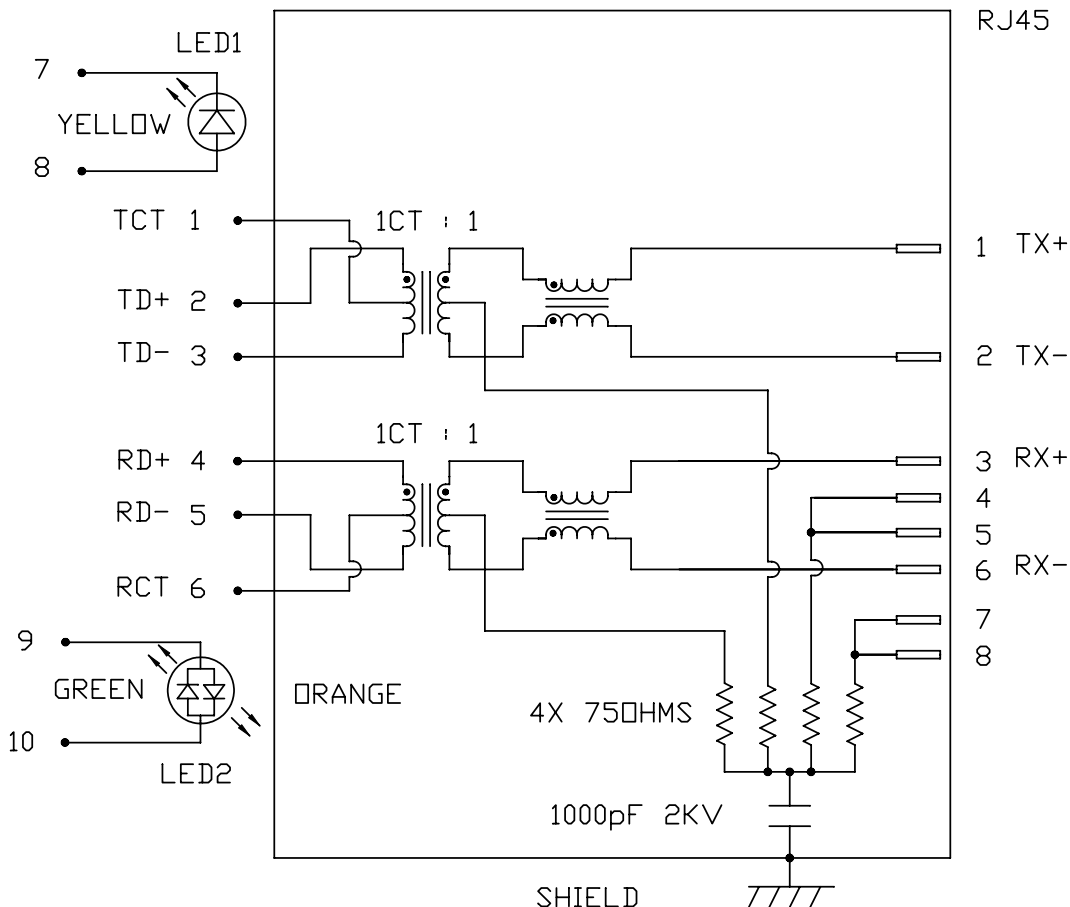
GREEN 2.2V TYP.

λD (DOMINANT WAVELENGTH)

IF=20mA ORANGE 610nm TYP.

GREEN 565nm TYP.

## SCHEMATIC

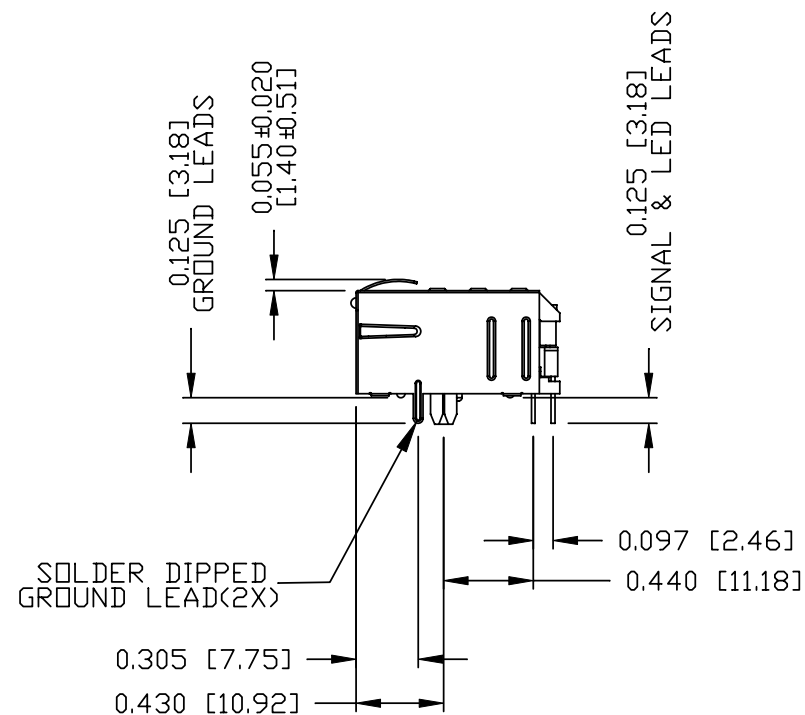
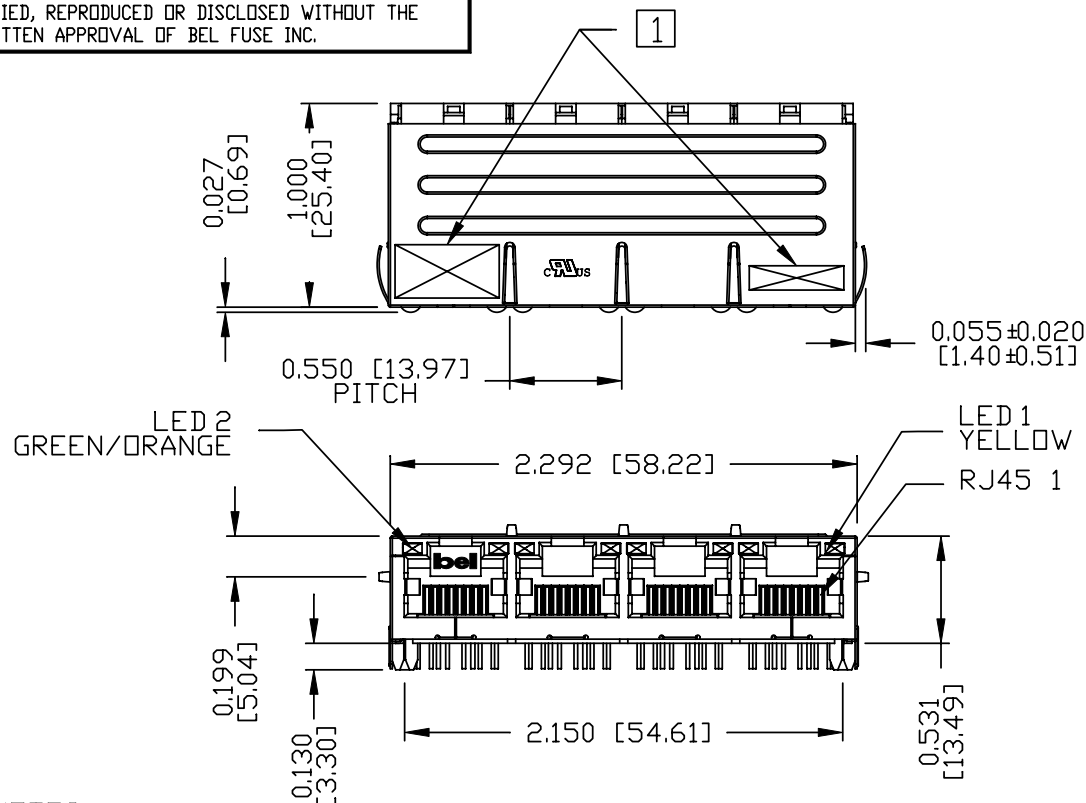


| ORIGINATED BY | DATE       | TITLE                                           | PART NO. / DRAWING NO. | STANDARD DIM. | [ ] METRIC DIM. AS REFERENCE |
|---------------|------------|-------------------------------------------------|------------------------|---------------|------------------------------|
| CHOW WANCHUNG | 2012-08-03 | 1X4 MagJack®<br>(4 Cores, MDIX, CM Termination) | 08B01X4T36-F           | TOL. IN INCH  | UNIT : INCH [mm] REV. : B    |
| DRAWN BY      | DATE       | 08B0-1X4T-36-F<br>PATENTED                      | FILE NAME              | .X            | SCALE : N/A SIZE : A4        |
| TAN QIGUANG   | 2012-08-03 |                                                 | 08B01X4T36-F_B.DWG     | .XX           | ⊕ --- PAGE : 2               |
|               |            |                                                 |                        | .XXX          |                              |

**bel**  
COMPONENTS OR A  
CONNECTED  
PLANET

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.

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,  
 DATE CODE AND PATENTED.

cUL US UL RECOGNIZED - FILE #E196366 AND E169987.

2. THE PRODUCT IS RoHS COMPLIANT.

3. THE PRODUCT IS PATENT PRODUCT. THE PATENT NUMBER  
 IS U.S. PAT. 5,736,910.

| ORIGINATED BY | DATE       | TITLE                                           | PART NO. / DRAWING NO. | STANDARD DIM. | [ ] METRIC DIM. AS REFERENCE |           |
|---------------|------------|-------------------------------------------------|------------------------|---------------|------------------------------|-----------|
| ANTON LIAO    | 2012-08-03 | 1X4 MagJack®<br>(4 Cores, MDIX, CM Termination) | 08B01X4T36-F           | TOL. IN INCH  | UNIT : INCH [mm]             | REV. : B  |
| DRAWN BY      | DATE       | FILE NAME                                       |                        | .X            | SCALE : N/A                  | SIZE : A4 |
| HE ZHEN       | 2012-08-03 | 08B0-1X4T-36-F<br>PATENTED                      | 08B01X4T36-F_B.DWG     | .XX           |                              | PAGE : 3  |
|               |            |                                                 |                        | .XXX          | ±0.010                       |           |

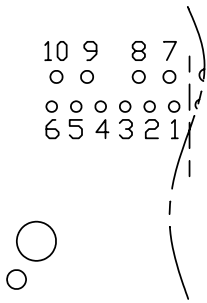


THE INFORMATION CONTAINED HEREIN IS CONSIDERED "PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF BEL FUSE INC.

RoHS

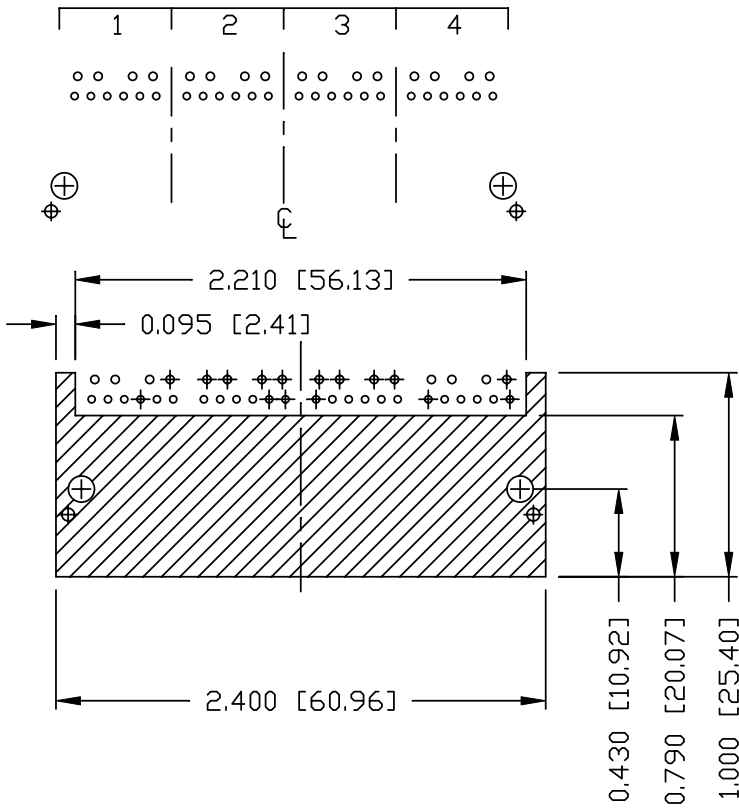


PIN ASSIGNMENT - EACH PORT  
COMPONENT SIDE VIEW



|   |      |
|---|------|
| 6 | RCT  |
| 5 | RD - |
| 4 | RD + |
| 3 | TD - |
| 2 | TD + |
| 1 | TCT  |

RECOMMENDED PCB FOOTPRINT  
COMPONENT SIDE VIEW



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

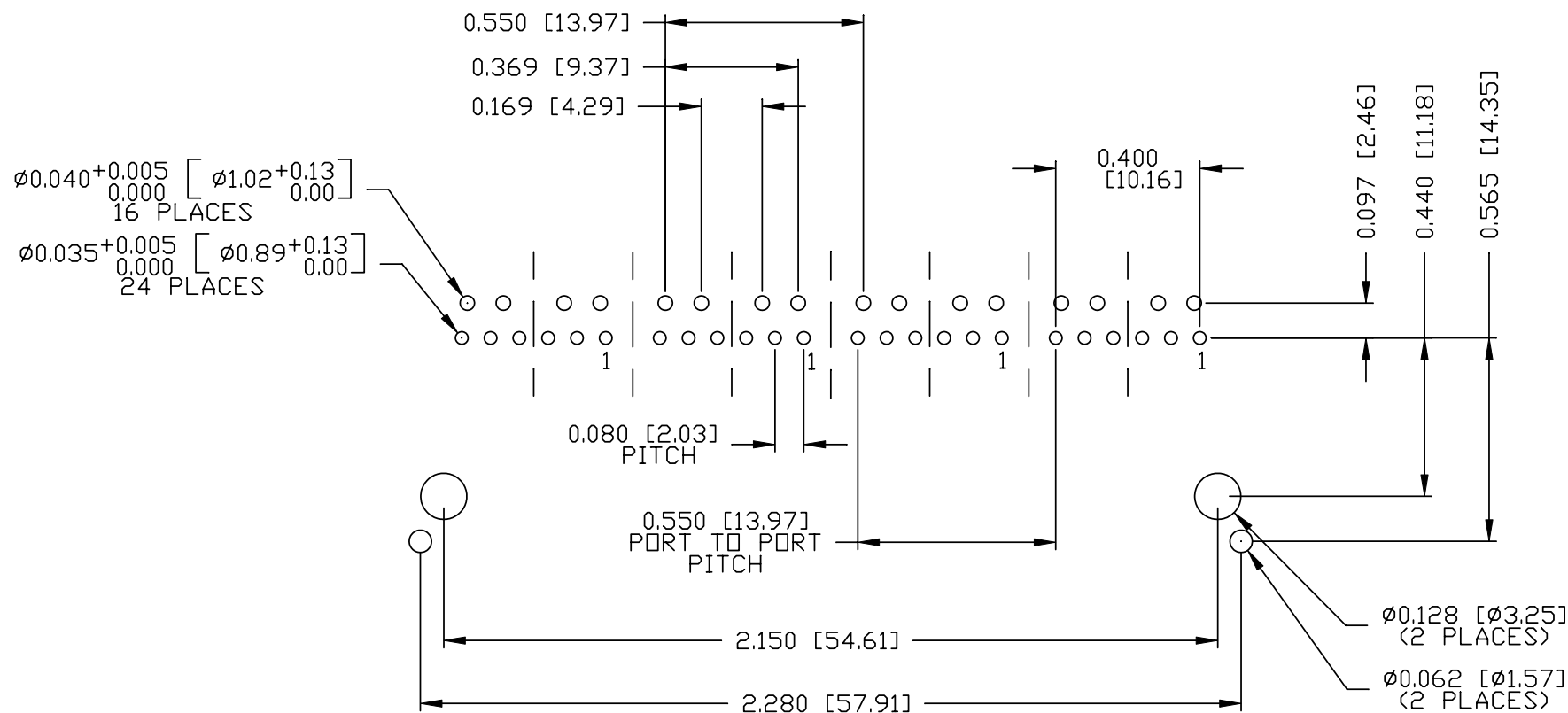
|                             |                    |                                                          |                                        |                                                    |                              |           |
|-----------------------------|--------------------|----------------------------------------------------------|----------------------------------------|----------------------------------------------------|------------------------------|-----------|
| ORIGINATED BY<br>ANTON LIAO | DATE<br>2012-08-03 | TITLE<br>1X4 MagJack®<br>(4 Cores, MDIX, CM Termination) | PART NO. / DRAWING NO.<br>08B01X4T36-F | STANDARD DIM.<br>TOL. IN INCH<br>.X<br>.XX<br>.XXX | [ ] METRIC DIM. AS REFERENCE |           |
|                             |                    |                                                          |                                        |                                                    | UNIT : INCH [mm]             | REV. : B  |
| DRAWN BY<br>HE ZHEN         | DATE<br>2012-08-03 | 08B0-1X4T-36-F<br>PATENTED                               | FILE NAME<br>08B01X4T36-F_B.DWG        | .XXX<br>±0.004                                     | SCALE : N/A                  | SIZE : A4 |
|                             |                    |                                                          |                                        |                                                    |                              | PAGE : 4  |





# RECOMMENDED PCB FOOTPRINT

## COMPONENT SIDE VIEW



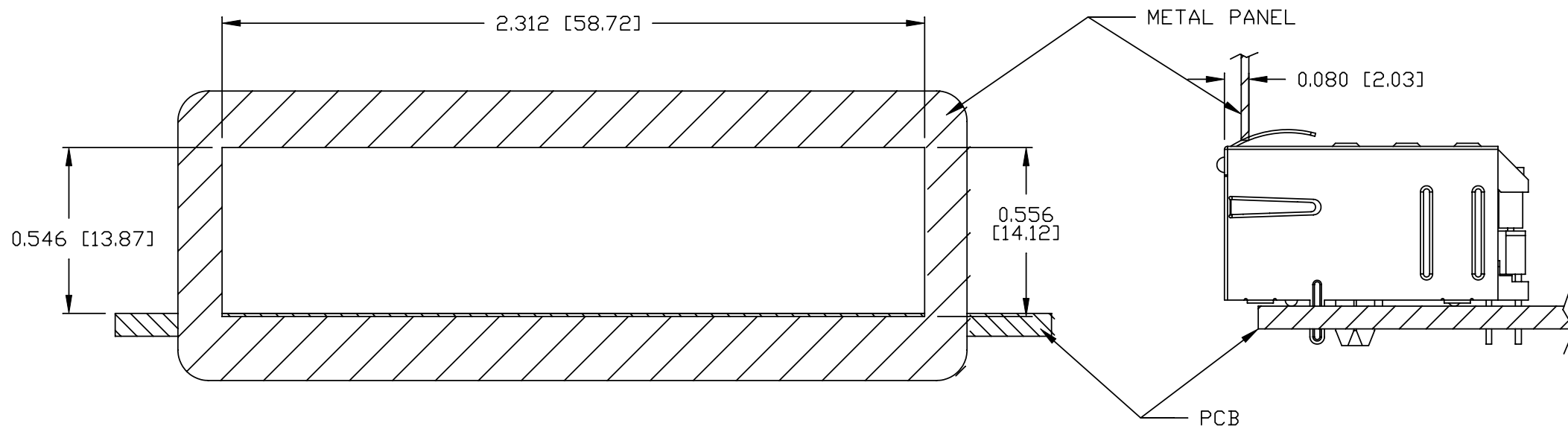
| ORIGINATED BY | DATE       | TITLE          | PART NO. / DRAWING NO. | STANDARD DIM. | [ ] METRIC DIM. AS REFERENCE |           |
|---------------|------------|----------------|------------------------|---------------|------------------------------|-----------|
| ANTON LIAO    | 2012-08-03 | 1X4 MagJack®   | 08B01X4T36-F           | TOL. IN INCH  | UNIT : INCH [mm]             | REV. : B  |
| DRAWN BY      | DATE       | 08B0-1X4T-36-F | FILE NAME              | .X            | SCALE : N/A                  | SIZE : A4 |
| HE ZHEN       | 2012-08-03 | PATENTED       | 08B01X4T36-F_B.DWG     | .XX           |                              | PAGE : 5  |
|               |            |                |                        | .XXX          | ±0.004                       |           |

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.

RoHS



### SUGGESTED PANEL OPENING



### NOTES:

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 : 0200-0148-17

PACKING QUANTITY : 30 PCS FINISHED GOODS PER TRAY.

10 TRAYS (300 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    | 2012-08-03 | 1X4 MagJack®<br>(4 Cores, MDIX, CM Termination) | 08B01X4T36-F           | .X            |        | SCALE : N/A                  | SIZE : A4 |
| DRAWN BY      | DATE       |                                                 | FILE NAME              | .XX           |        |                              | PAGE : 6  |
|               |            |                                                 |                        | .XXX          | ±0.004 |                              |           |
| HE ZHEN       | 2012-08-03 | 08B0-1X4T-36-F<br>PATENTED                      | 08B01X4T36-F_B.DWG     |               |        |                              |           |

**bel**  
COMPONENTS FOR A  
CONNECTED  
PLANET