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

LED1

TCT 1 ←

TD+ 2 •

TD- 3 ↔

RD+ 4 •

RD- 5 ←

RCT 6 ←

LED2

**GREEN** 



**RJ45** 

1 TX+

2 TX-

3 RX+

6 RX-

5

8

#### ELECTRICAL CHARACTERISTICS @ 25°C

TURNS RATIO

TX 1CT : 1

RX 1CT : 1

DCL @ 100kHz/100mVRMS

8mA DC BIAS

INS. LOSS

1MHz T□ 100MHz

RET. LOSS (MIN)

1MHz-30MHz

30MHz-60MHz 60MHz-80MHz

60MHZ-60MHZ

CROSS TALK (TX - RX) 500kHz-100MHz

3001112 10011112

CM TO CM REJ 100kHz-100MHz

CM TO DM REJ

100kHz-100MHz

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.

350 uH MIN.

-1.0 dB MAX

-35 dB MIN

-30 dB MIN

-40 dB MIN

 $-18+20L\Box G(F/30MHz) dB$ 

-18 dB

-12 dB

AD (DOMINANT WAVELENGTH) IF=20mA YELLOW 590nm TYP.

LED 2

VF (FORWARD VOLTAGE)

IF=20mA ORANGE 2.0V TYP.

GREEN 2.2V TYP.

AD (DOMINANT WAVELENGTH) IF=20mA ORANGE 610nm TYP.

GREEN 565nm TYP.

| ORIGI    | NATED BY   | DATE       |
|----------|------------|------------|
| CHUW     | / WANCHUNG | 2012-08-03 |
| DRAW     | V RY       | DATE       |
| 22421112 | , DI       | DAIL       |

| TITI           | . <b>E</b> 1X | 4 Mag | Jac | k®           |  |  |  |
|----------------|---------------|-------|-----|--------------|--|--|--|
| (4             | Cores,        | MDIX, | СМ  | Termination) |  |  |  |
| 08B0-1X4T-36-F |               |       |     |              |  |  |  |
|                | PATENTED      |       |     |              |  |  |  |

| PART NO. / DRAWING NO. | STANDA       | RD DIM. | [ ] METRIC DIM. AS REFERENCE |          |  |
|------------------------|--------------|---------|------------------------------|----------|--|
| 08B01X4T36-F           | TOL. IN INCH |         | UNIT : INCH [mm]             | REV.: B  |  |
| FILE NAME              | .X           |         | SCALE: N/A                   | SIZE: A4 |  |
| 08B01X4T36-F B.DWG     | .XX          |         | 1                            |          |  |
| 00001V4120_L TMG       | XXX          |         | <b>I</b> <del>(Φ)</del> €-+  | PAGE: 2  |  |

SCHEMATIC

4X 750HMS

SHIELD

1000pF 2KV

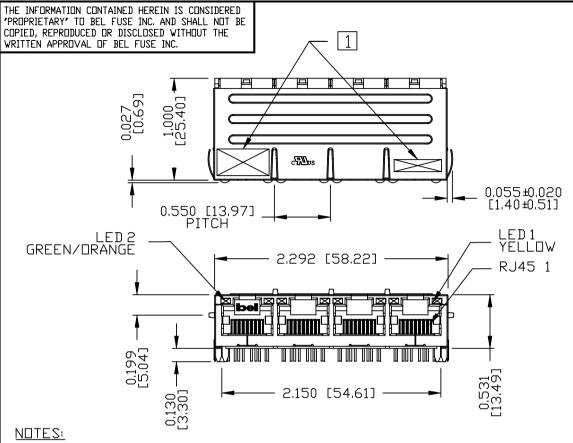
7777

1CT : 1

1CT : 1

DRANGE





PLASTIC HOUSING: THERMOPLASTIC PBT

FLAMMABILITY RATING UL 94V-0

CONTACTS PLATING: 15 MICRO-INCH HARD GOLD PLATING

OR EQUIVALENT.

TIN-COATED COPPER WIRE, DIA 0.018 INCH. PINS:

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.

0,125 [3,18] GROUND LEADS 0.097 [2.46] SOLDER DIPPED GROUND LEAD(2X) 0.440 [11.18] 0.305 [7.75] -0.430 [10.92]

c Nusul Recognized - File #E196366 AND E169987.

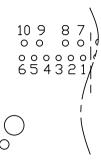
- 2. THE PRODUCT IS ROHS COMPLIANT.
- 3. THE PRODUCT IS PATENT PRODUCT. THE PATENT NUMBER IS U.S. PAT. 5,736,910.

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

**RoHS** 

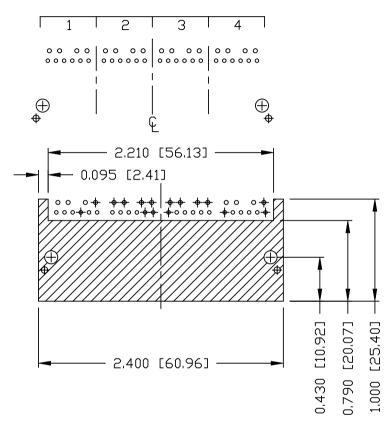


# PIN ASSIGNMENT - EACH PORT COMPONENT SIDE VIEW



| 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 | DATE       | TITLE 1X4 MagJack®              |
|---------------|------------|---------------------------------|
| ANTON LIAO    | 2012-08-03 | (4 Cores, MDIX, CM Termination) |
| DRAWN BY      | DATE       | 08B0-1X4T-36-F                  |
| HE ZHEN       | 2012-08-03 | PATENTED                        |

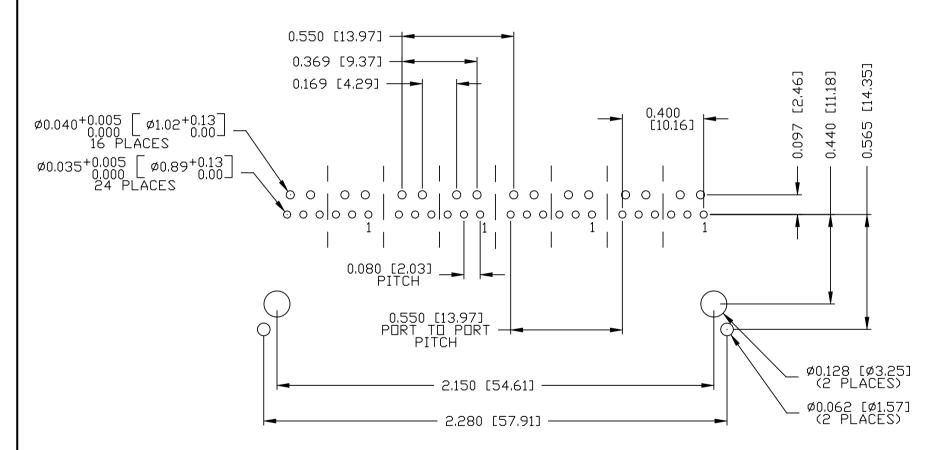
| PART NO. / DRAWING NO. | BOY IN INCID |        | [ ] METRIC DIM. AS | REFERENCE |
|------------------------|--------------|--------|--------------------|-----------|
| 08B01X4T36-F           |              |        | UNIT : INCH [mm]   | REV. : B  |
| FILE NAME              | .X           |        | SCALE: N/A         | SIZE: A4  |
| 08B01X4T36-F_B.DWG     | .XX          | #0.004 | ₩                  | PAGE: 4   |





### RECOMMENDED PCB FOOTPRINT

COMPONENT SIDE VIEW

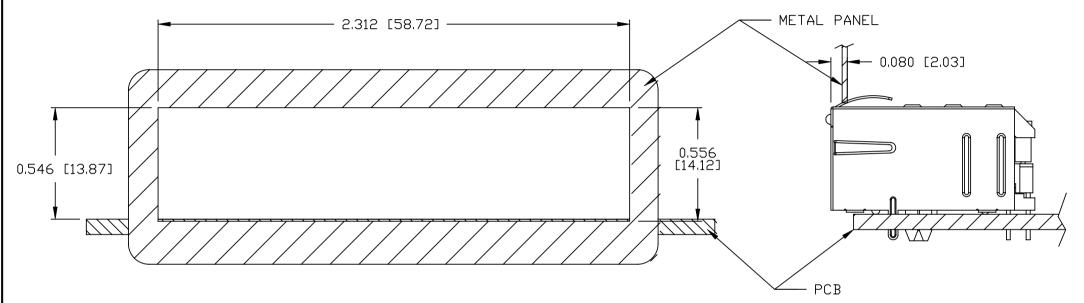


| ORIGINATED BY | DATE       | TITLE 1X4 MagJack®              | PART NO. / DRAWING NO. | STANDARD DIM. | [ ] METRIC DIM. AS | REFERENCE |
|---------------|------------|---------------------------------|------------------------|---------------|--------------------|-----------|
| ANTON LIAO    | 2012-08-03 | (4 Cores, MDIX, CM Termination) | 08B01X4T36-F           | TOL. IN INCH  | UNIT : INCH [mm]   | REV. : B  |
| DRAWN BY      | DATE       | 08B0-1X4T-36-F                  | FILE NAME              | .X<br>.XX     | SCALE: N/A         | SIZE: A4  |
| HE ZHEN       | 2012-08-03 | PATENTED                        | 08B01X4T36-F_B.DWG     | .XXX ±0.004   |                    | PAGE: 5   |





### 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 1X4 MagJack®              | PART NO. / DRAWING NO. | STANDARD DIM. | [ ] METRIC DIM. AS REFERENCE |                 |
|---------------|------------|---------------------------------|------------------------|---------------|------------------------------|-----------------|
| ANTON LIAO    | 2012-08-03 | (4 Cores, MDIX, CM Termination) | 08B01X4T36-F           | TOL. IN INCH  | UNIT : INCH [mm] REV. : B    |                 |
| DRAWN BY      | DATE       | 08B0-1X4T-36-F                  | FILE NAME              | .X<br>.XX     | SCALE: N/A SIZE: A4          | COMPONENT       |
| HE ZHEN       | 2012-08-03 | PATENTED                        | 08B01X4T36-F_B.DWG     | .XXX ±0.004   | PAGE : 6                     | CONNE<br>PLANET |



### **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bel:

08B0-1X4T-36-F