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"PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE  
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WRITTEN APPROVAL OF BEL FUSE INC.



| LED 2 & 4 POLARITY |        |       | LED 1 & 3 POLARITY |        |       |
|--------------------|--------|-------|--------------------|--------|-------|
| PIN 11             | PIN 12 | COLOR | PIN 13             | PIN 14 | COLOR |
| +                  | -      | GREEN | +                  | -      | GREEN |

# ELECTRICAL CHARACTERISTICS @ 25°C

## URNS RATIO

|     |               |
|-----|---------------|
| TP1 | 1CT : 1CT ±2% |
| TP2 | 1CT : 1CT ±2% |
| TP3 | 1CT : 1CT ±2% |
| TP4 | 1CT : 1CT ±2% |

□CL @ 100kHz/100mVRMS

8mA DC BIAS 350μH MIN.

## INS. LOSS

|                  |             |
|------------------|-------------|
| 0.1MHz TO 1MHz   | -1.1 dB MAX |
| 1MHz TO 65MHz    | -0.5 dB MAX |
| 65MHz TO 100MHz  | -0.8 dB MAX |
| 100MHz TO 125MHz | -1.2 dB MAX |

## RET. LOSS (MIN)

|              |                       |
|--------------|-----------------------|
| 0.5MHz-40MHz | -18 dB                |
| 40MHz-100MHz | -12+20LOG(f/80MHz) dB |

## CM TO CM REJ

|                 |            |
|-----------------|------------|
| 100kHz - 100MHz | -30 dB MIN |
|-----------------|------------|

## CM TO DM REJ

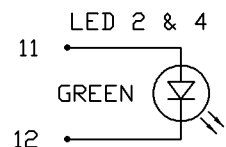
|                 |            |
|-----------------|------------|
| 100kHz - 100MHz | -35 dB MIN |
|-----------------|------------|

HIPOT (Isolation Voltage): 1500 Vrms

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

## LEDS 1, 2, 3 AND 4

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



TRD1- 1

TRD1+ 2

TRD2- 3

TRD2+ 4

TRD3- 5

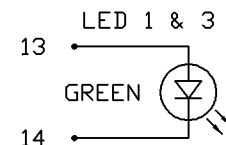
TRD3+ 6

TRD4- 7

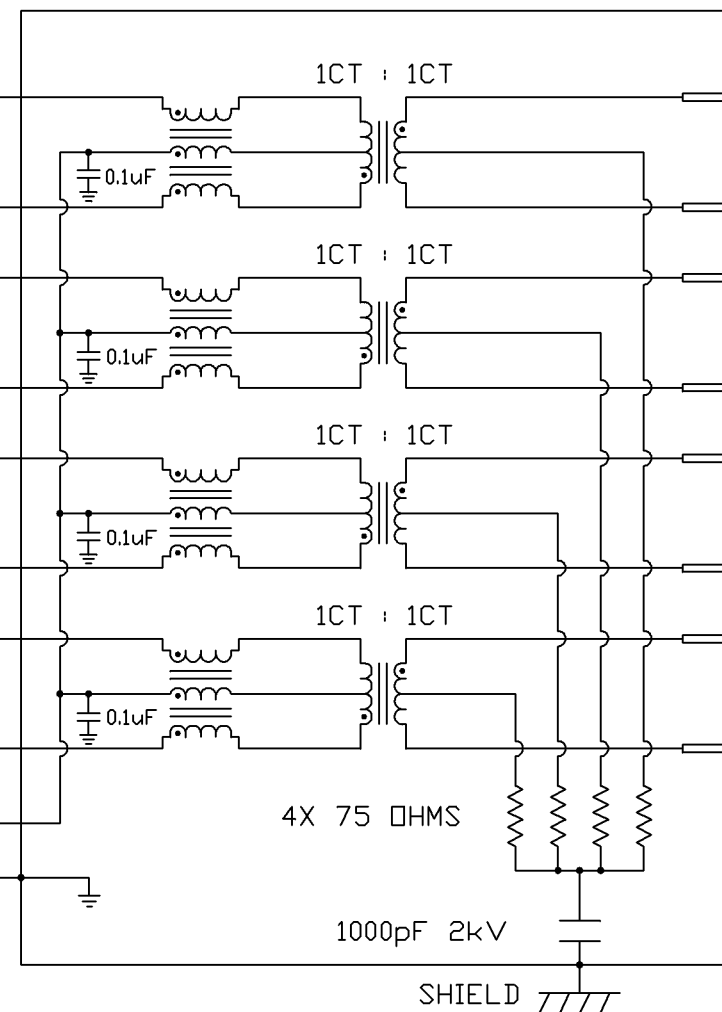
TRD4+ 8

TRDCT1/2/3/4 9

GND 10



## SCHEMATIC



RJ45

1 TRP1+

2 TRP1-

3 TRP2+

6 TRP2-

4 TRP3+

5 TRP3-

7 TRP4+

8 TRP4-

|               |          |
|---------------|----------|
| ORIGINATED BY | DATE     |
| CHOW WANCHUNG | 11-29-08 |
| DRAWN BY      | DATE     |
| WEIDE LEE     | 11-29-08 |

|                                                               |
|---------------------------------------------------------------|
| TITLE                                                         |
| 2X2 gigabit MagJack®<br>WITH UPPER AND LOWER LED<br>(8 Cores) |

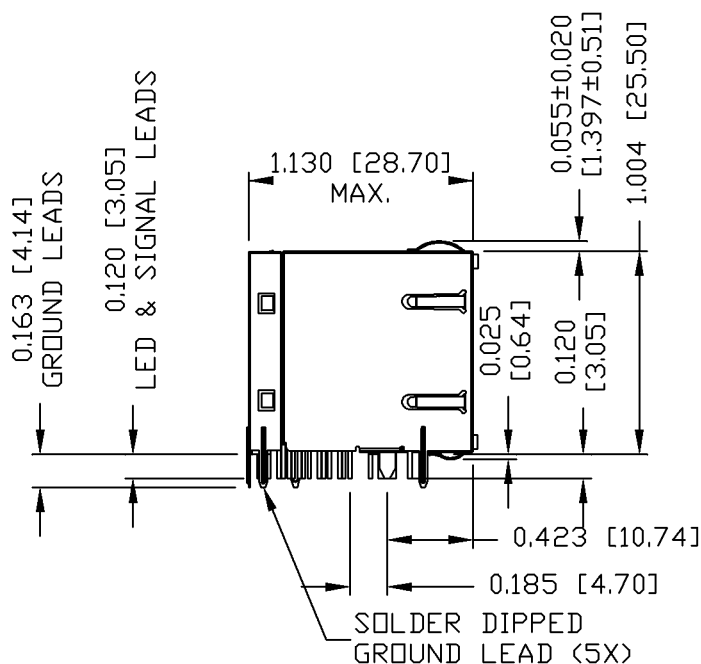
|                        |
|------------------------|
| PART NO. / DRAWING NO. |
| 0879-2G2R-54           |
| FILE NAME              |
| 0879-2G2R-54_C.DWG     |

|               |
|---------------|
| STANDARD DIM. |
| TOL. IN INCH  |
| .X            |
| .XX           |
| .XXX          |

|                              |
|------------------------------|
| [ ] METRIC DIM. AS REFERENCE |
| UNIT : INCH [mm]             |
| SCALE : N/A                  |
| REV. : C                     |
| SIZE : A4                    |
| PAGE : 2                     |



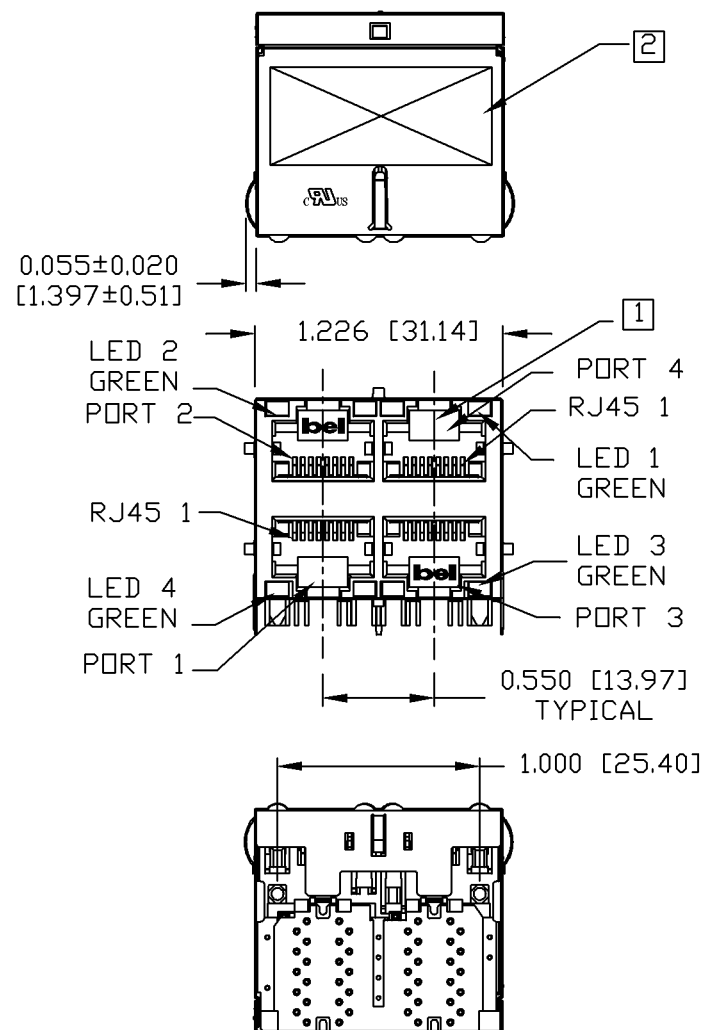
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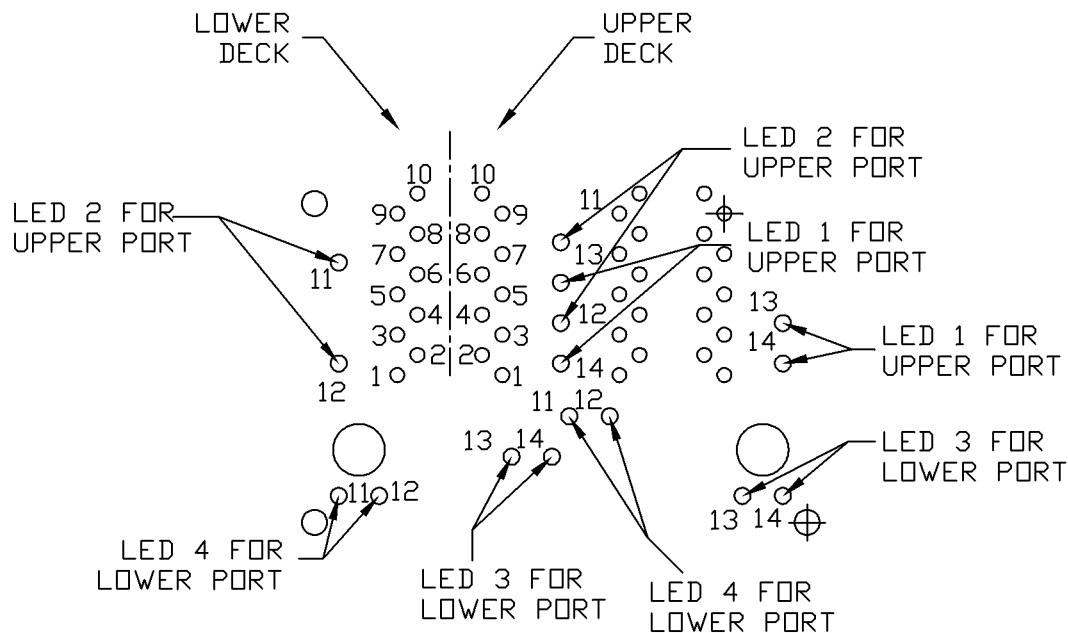
#### NOTES:

PLASTIC HOUSING: THERMOPLASTIC PBT  
FLAMMABILITY RATING UL 94V-0  
CONTACT PLATING: 50 MICRO-INCH HARD GOLD PLATING  
OUTPUT PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.  
METAL SHIELD: NICKEL PLATED ON COPPER ALLOY.  
(ALL GROUND LEADS ARE SOLDER DIPPED)

1. JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.
  2. MARK PART WITH MFG LOGO, MFG NAME, PART NUMBER, AND DATE CODE.
  3. RoHS COMPLIANCE, PER EU DIRECTIVE 2002/95/EC.
- c US UL RECOGNIZED - FILE #E196366 AND E169987.



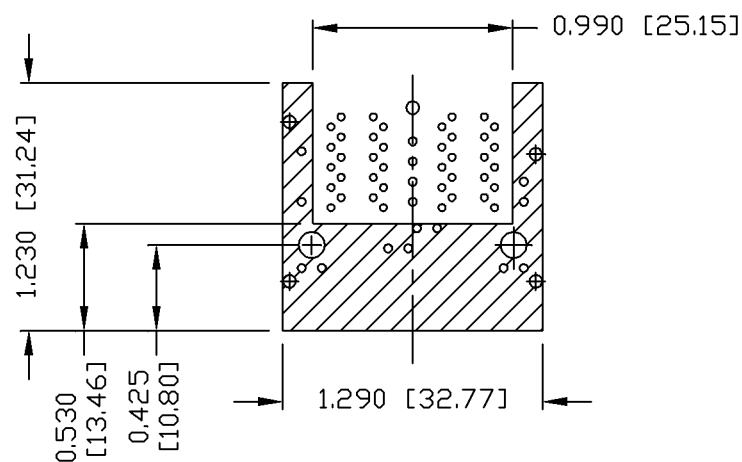
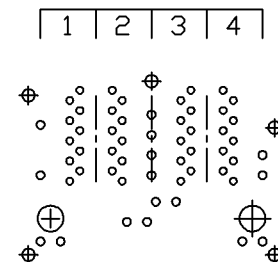
| ORIGINATED BY | DATE     | TITLE                                                         | PART NO. / DRAWING NO. | STANDARD DIM. |        | [ ] METRIC DIM. AS REFERENCE |           | <br>COMPONENTS FOR A<br>CONNECTED<br>PLANET |
|---------------|----------|---------------------------------------------------------------|------------------------|---------------|--------|------------------------------|-----------|---------------------------------------------|
|               |          |                                                               |                        | TOL. IN INCH  |        | UNIT : INCH [mm]             | REV. : C  |                                             |
| DAVID CAO     | 11-29-08 | 2X2 gigabit MagJack®<br>WITH UPPER AND LOWER LED<br>(8 Cores) | 0879-2G2R-54           | .X            |        | SCALE : N/A                  | SIZE : A4 |                                             |
| DRAWN BY      | DATE     |                                                               |                        | .XX           |        |                              | PAGE : 3  |                                             |
| LU XUEPING    | 11-29-08 |                                                               |                        | .XXX          | ±0.010 |                              |           |                                             |



PIN-OUT INFORMATION  
(COMPONENT SIDE VIEW)

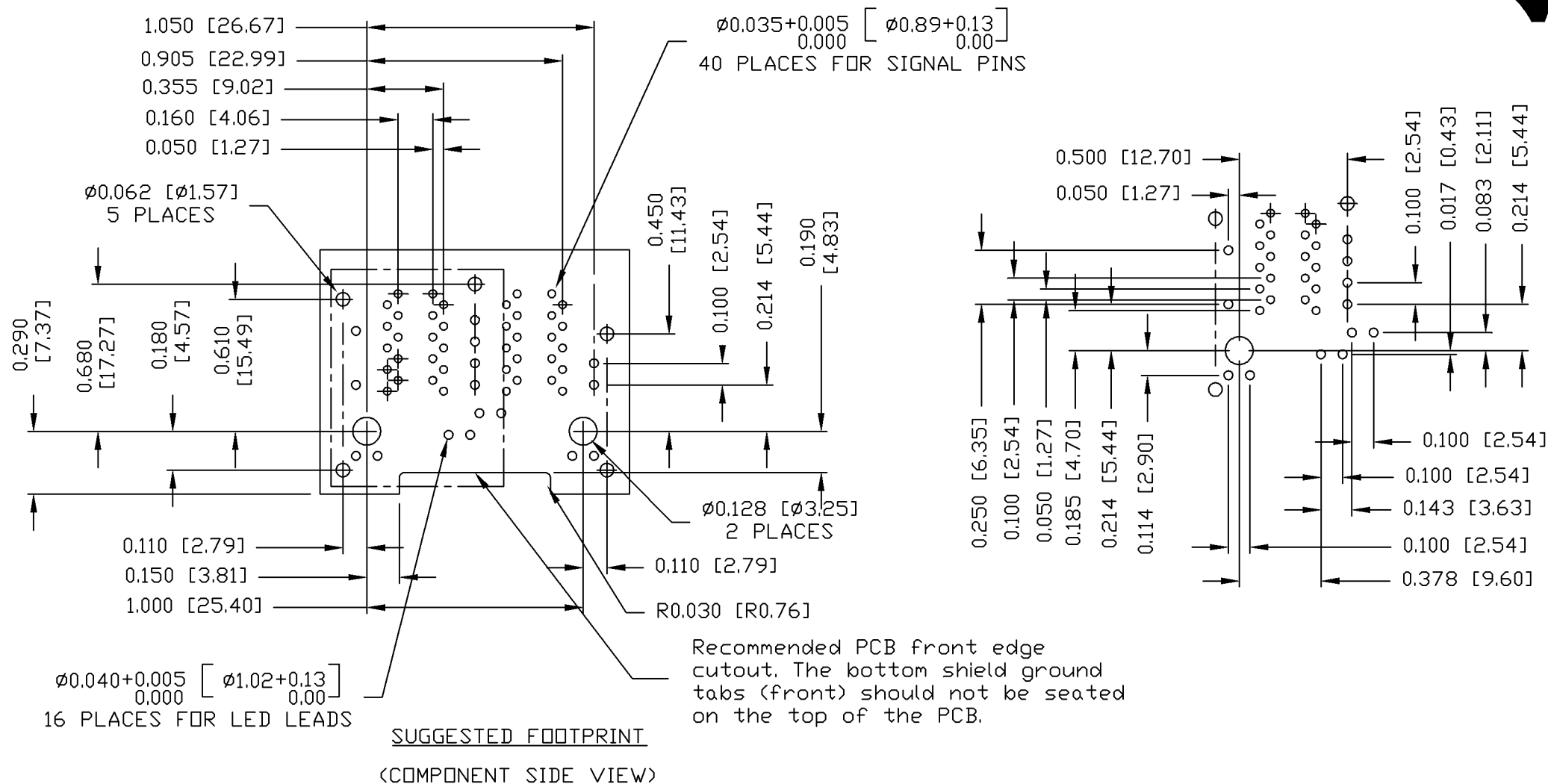
|    |              |
|----|--------------|
| 10 | GND          |
| 9  | TRDCT1/2/3/4 |
| 8  | TRD 4+       |
| 7  | TRD 4-       |
| 6  | TRD 3+       |
| 5  | TRD 3-       |
| 4  | TRD 2+       |
| 3  | TRD 2-       |
| 2  | TRD 1+       |
| 1  | TRD 1-       |

PORT ASSIGNMENT  
(COMPONENT SIDE VIEW)



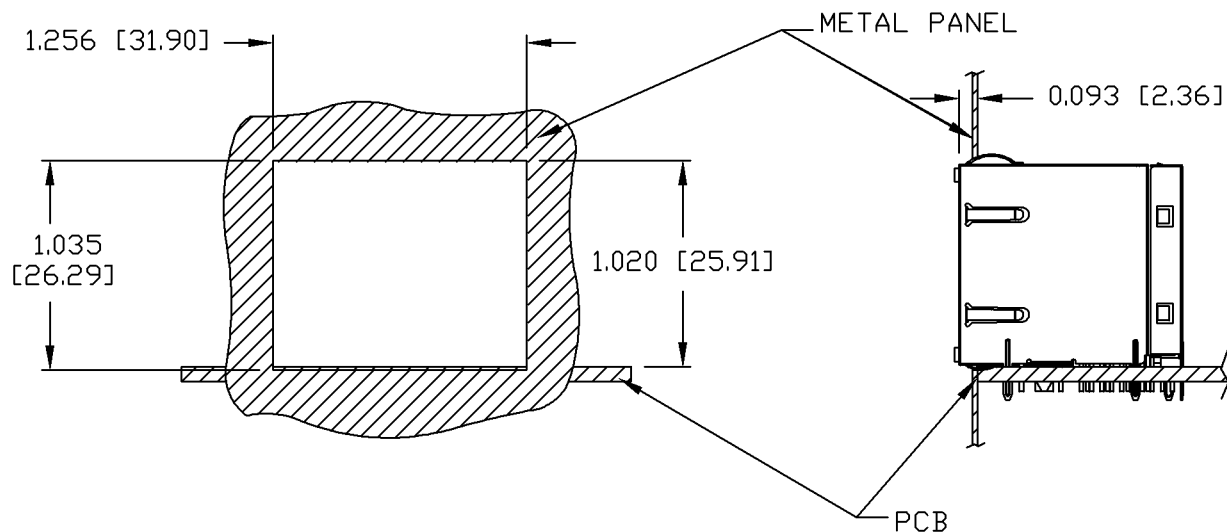
THE SHADED AREA ON THE CUSTOMER BOARD ARE RECOMMENDED TO BE CLEAR OFF ANY VIA HOLE OR COMPONENT PAD.

| ORIGINATED BY | DATE     | TITLE                                 | PART NO. / DRAWING NO. | STANDARD DIM.<br>TOL. IN INCH | [ ] METRIC DIM. AS REFERENCE |
|---------------|----------|---------------------------------------|------------------------|-------------------------------|------------------------------|
| DAVID CAO     | 11-29-08 | 2X2 gigabit MagJack®                  | 0879-2G2R-54           | .X                            | UNIT : INCH [mm] REV. : C    |
| DRAWN BY      | DATE     | WITH UPPER AND LOWER LED<br>(8 Cores) | FILE NAME              | .XX                           | SCALE : N/A SIZE : A4        |
| LU XUEPING    | 11-29-08 |                                       | 0879-2G2R-54_C.DWG     | .XXX ±0.010                   | PAGE : 4                     |



| ORIGINATED BY | DATE     | TITLE                              | PART NO. / DRAWING NO. | STANDARD DIM. TOL. IN INCH | [ ] METRIC DIM. AS REFERENCE |           |
|---------------|----------|------------------------------------|------------------------|----------------------------|------------------------------|-----------|
| DAVID CAO     | 11-29-08 | 2X2 gigabit MagJack®               | 0879-2G2R-54           | .X                         | UNIT : INCH [mm]             | REV. : C  |
| DRAWN BY      | DATE     | WITH UPPER AND LOWER LED (8 Cores) | FILE NAME              | .XX                        | SCALE : N/A                  | SIZE : A4 |
| LU XUEPING    | 11-29-08 |                                    | 0879-2G2R-54_C.DWG     | .XXX ±0.004                |                              | PAGE : 5  |

### 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-P5 (TOP)  
0200-9999-P6 (BOTTOM)

PACKING QUANTITY : 28 PCS FINISHED GOODS PER TRAY  
7 TRAYS (196 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.<br>TOL. IN INCH | [ ] METRIC DIM. AS REFERENCE |
|---------------|----------|--------------------------|------------------------|-------------------------------|------------------------------|
| DAVID CAO     | 11-29-08 | 2X2 gigabit MagJack®     | 0879-2G2R-54           | .X                            | UNIT : INCH [mm] REV. : C    |
| DRAWN BY      | DATE     | WITH UPPER AND LOWER LED | FILE NAME              | .XX                           | SCALE : N/A SIZE : A4        |
| LU XUEPING    | 11-29-08 | (8 Cores)                | 0879-2G2R-54_C.DWG     | .XXX ±0.004                   | PAGE : 6                     |