

## ELECTRICAL CHARACTERISTICS @ 25°C

### URNS RATIO

|     |                     |
|-----|---------------------|
| TP1 | 1CT : 1CT $\pm 2\%$ |
| TP2 | 1CT : 1CT $\pm 2\%$ |
| TP3 | 1CT : 1CT $\pm 2\%$ |
| TP4 | 1CT : 1CT $\pm 2\%$ |

### CL @ 100kHz/100mVRMS

|             |                  |
|-------------|------------------|
| 8mA DC BIAS | 350 $\mu$ H 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 |
|-----------------|------------|

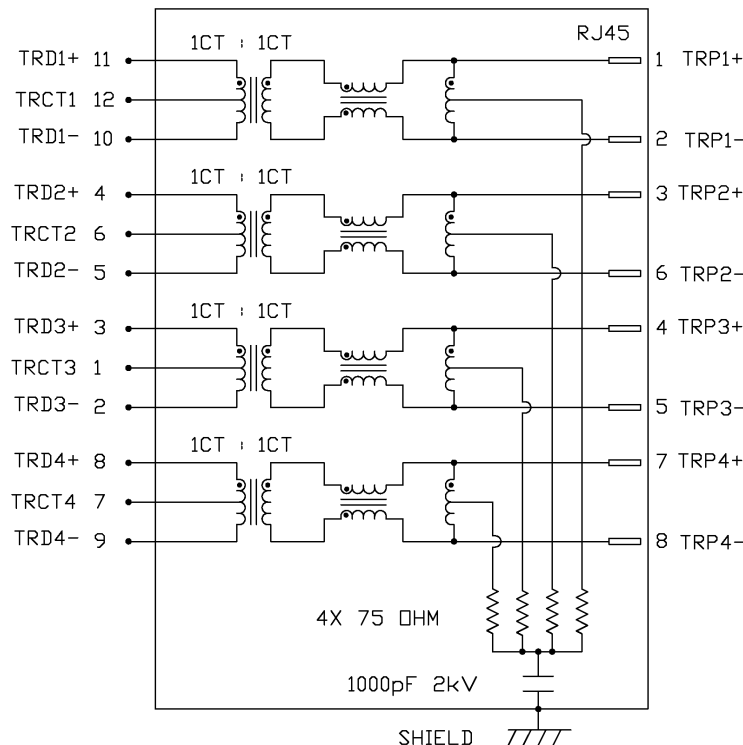
### CM TO DM REJ

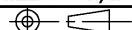
|                 |            |
|-----------------|------------|
| 100kHz - 100MHz | -35 dB MIN |
|-----------------|------------|

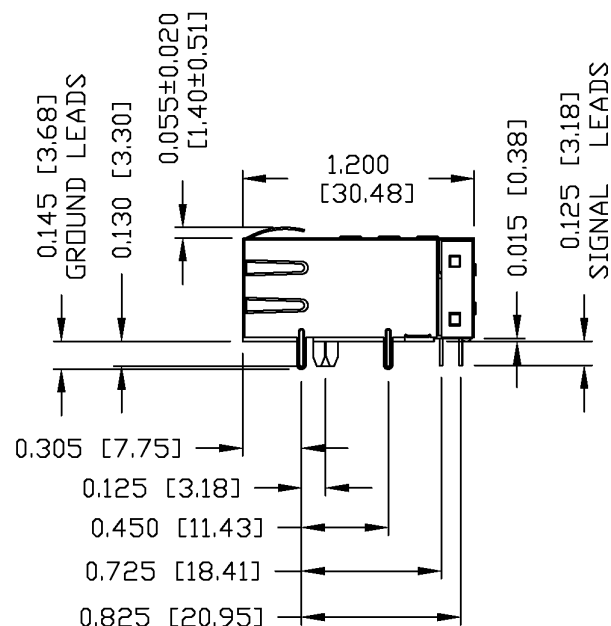
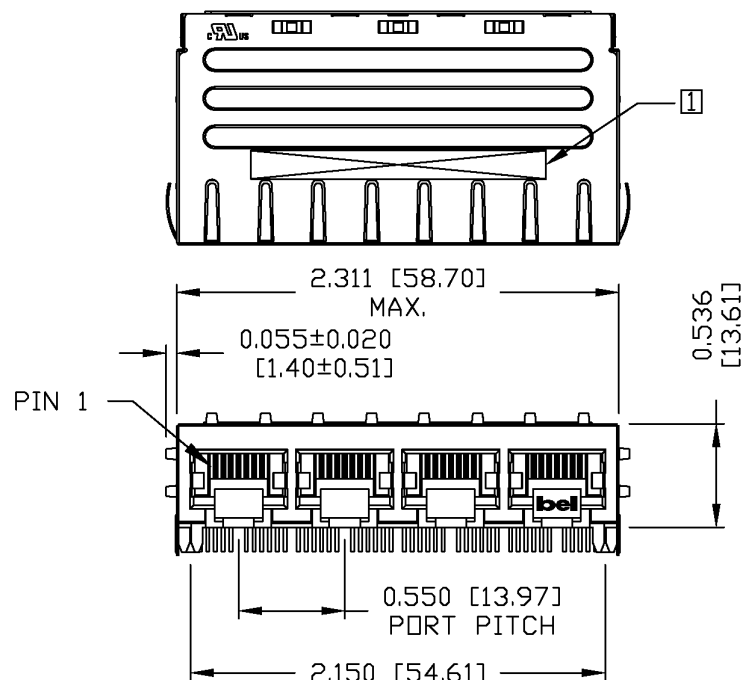
### HIPOT (Isolation Voltage):

1500 Vrms

## SCHEMATIC



|                        |                  |                                                 |                                        |                                                    |                                                                                       |           |
|------------------------|------------------|-------------------------------------------------|----------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------------|-----------|
| ORIGINATED BY<br>CHUNG | DATE<br>06-25-05 | TITLE<br>glgabit MagJack® 1X4<br>0813-1X4T-23-F | PART NO. / DRAWING NO.<br>08131X4T23-F | STANDARD DIM.<br>TOL. IN INCH<br>.X<br>.XX<br>.XXX | [ ] METRIC DIM. AS REFERENCE                                                          |           |
|                        |                  |                                                 |                                        |                                                    | UNIT : INCH [mm]                                                                      | REV. : A  |
| DRAWN BY<br>DE         | DATE<br>06-25-05 |                                                 | FILE NAME<br>08131X4T23-FA.DWG         |                                                    | SCALE : N/A                                                                           | SIZE : A4 |
|                        |                  |                                                 |                                        |                                                    |  | PAGE : 2  |



**NOTES:**

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

[1] MARK PART WITH MFG. LOGO; MFG. NAME; PART NUMBER; DATE CODE.

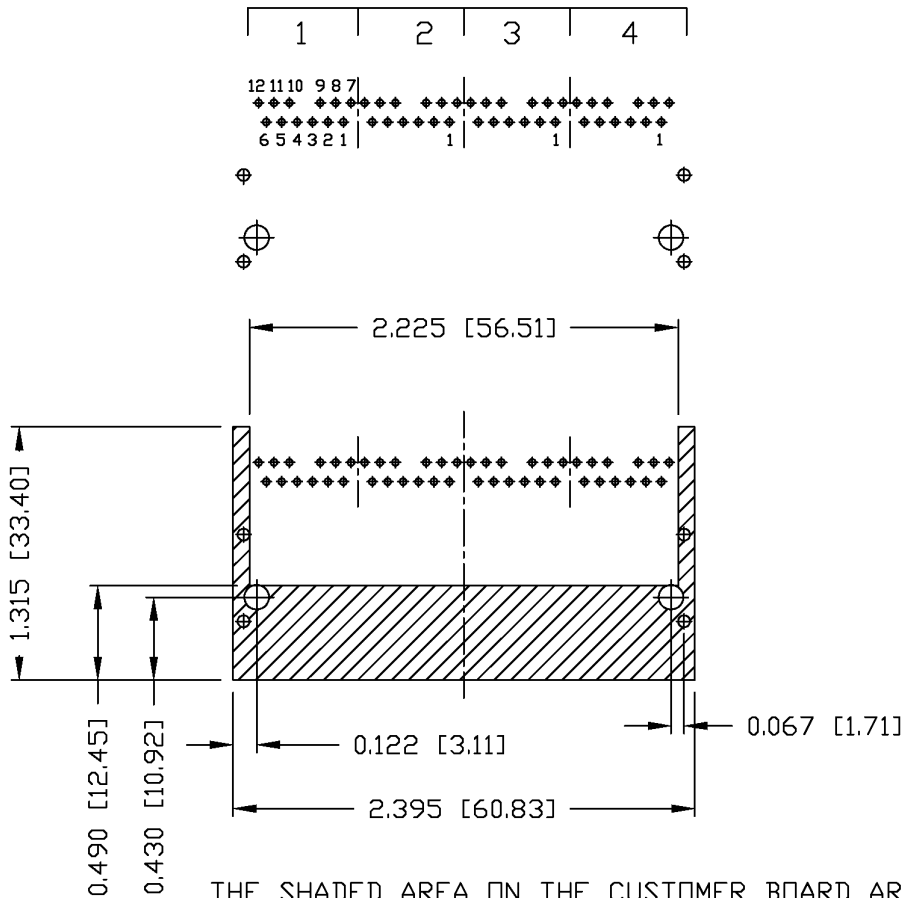
**cULus** UL RECOGNIZED - FILE #E196366 AND E169987.  
RoHS COMPLIANCE, PER EU DIRECTIVE 2002/95/EC.

| ORIGINATED BY | DATE     | TITLE                | PART NO. / DRAWING NO. | STANDARD DIM.<br>TOL. IN INCH | [ ] METRIC DIM. AS REFERENCE |           |
|---------------|----------|----------------------|------------------------|-------------------------------|------------------------------|-----------|
| BILL          | 06-25-05 | gigabit MagJack® 1X4 | 08131X4T23-F           |                               | UNIT : INCH [mm]             | REV. : A  |
| DRAWN BY      | DATE     |                      | FILE NAME              | .X                            | SCALE : N/A                  | SIZE : A4 |
| MEI           | 06-25-05 | 0813-1X4T-23-F       | 08131X4T23-FA.DWG      | .XX                           |                              |           |
|               |          |                      |                        | .XXX                          | ±0.010                       | PAGE : 3  |

PIN-OUT INFORMATION  
(COMPONENT SIDE VIEW)

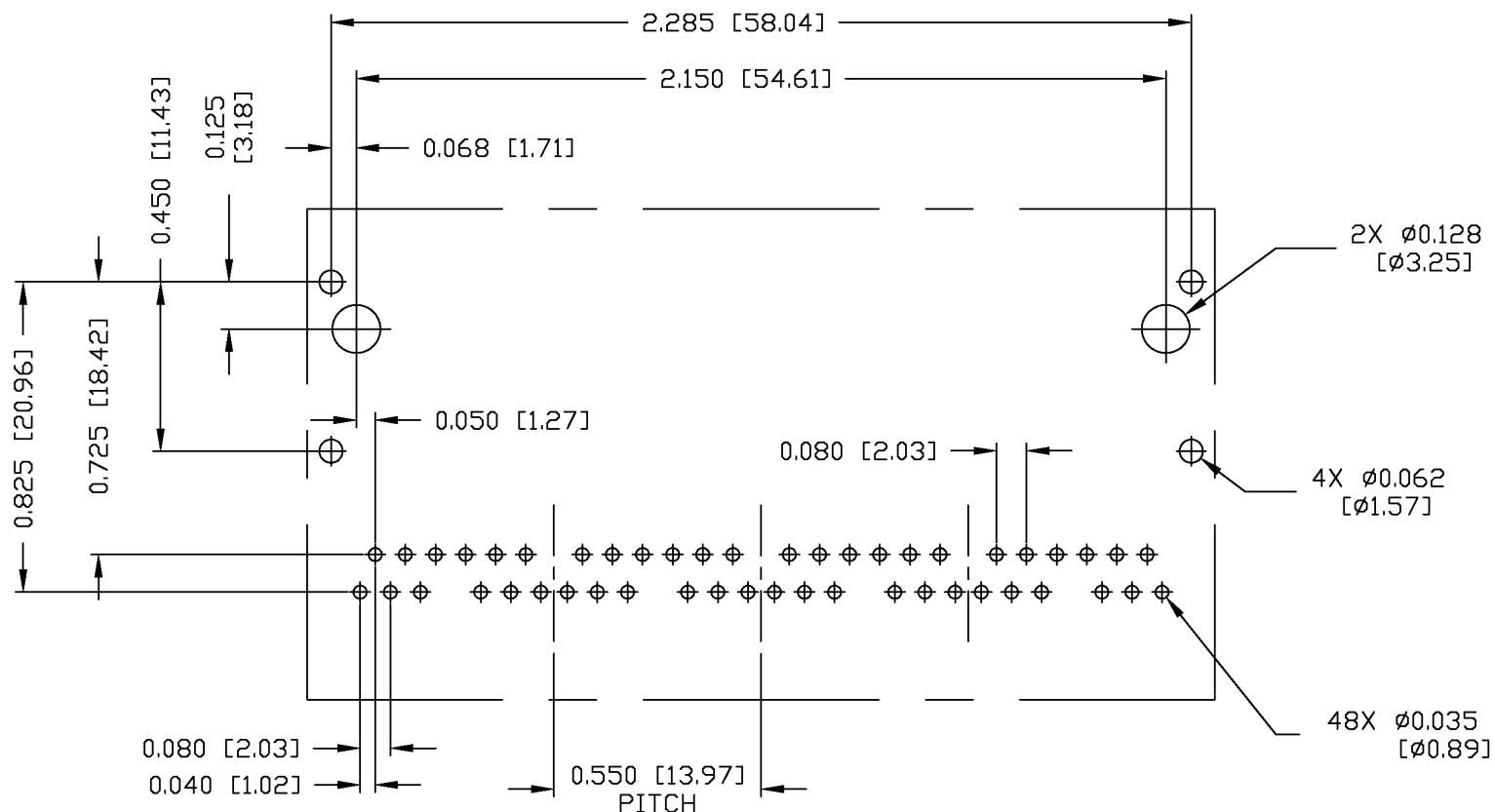
|    |       |
|----|-------|
| 12 | TRCT1 |
| 11 | TRD1+ |
| 10 | TRD1- |
| 9  | TRD4- |
| 8  | TRD4+ |
| 7  | TRCT4 |
| 6  | TRCT2 |
| 5  | TRD2- |
| 4  | TRD2+ |
| 3  | TRD3+ |
| 2  | TRD3- |
| 1  | TRCT3 |

PIN AND 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 |
|---------------|----------|----------------------|------------------------|-------------------------------|------------------------------|
| BILL          | 06-25-05 | gigabit MagJack® 1X4 | 08131X4T23-F           | .X                            | UNIT : INCH [mm] REV. : A    |
| DRAWN BY      | DATE     | 0813-1X4T-23-F       | FILE NAME              | .XX                           | SCALE : N/A SIZE : A4        |
| MEI           | 06-25-05 |                      | 08131X4T23-FA.DWG      | .XXX ±0.010                   | PAGE : 4                     |

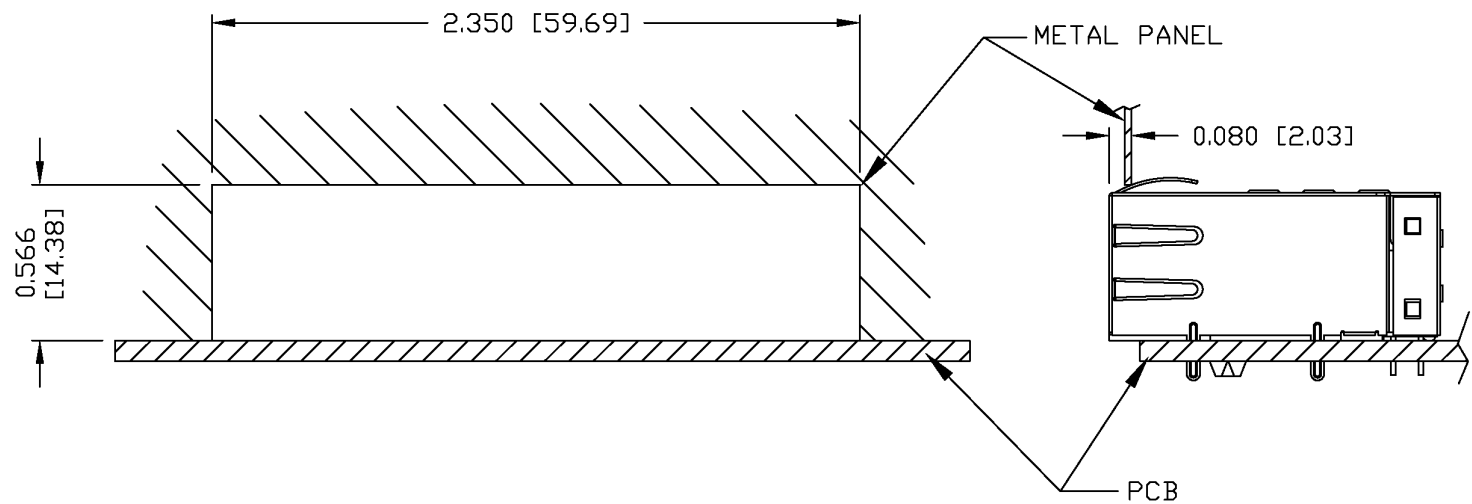


RECOMMENDED PCB FOOTPRINT  
(COMPONENT SIDE VIEW)

| ORIGINATED BY | DATE     | TITLE                | PART NO. / DRAWING NO. | STANDARD DIM.<br>TOL. IN INCH | [ ] METRIC DIM. AS REFERENCE |
|---------------|----------|----------------------|------------------------|-------------------------------|------------------------------|
| BILL          | 06-25-05 | gigabit MagJack® 1X4 | 08131X4T23-F           | .X                            | UNIT : INCH [mm] REV. : A    |
| DRAWN BY      | DATE     |                      | FILE NAME              | .XX                           | SCALE : N/A SIZE : A4        |
| MEI           | 06-25-05 | 0813-1X4T-23-F       | 08131X4T23-FA.DWG      | .XXX ±0.010                   | PAGE : 5                     |



SUGGESTED PANEL OPENING



PACKING INFORMATION

PACKING TRAY: 0200-0148-37 (TOP)

0200-0148-38 (BOTTOM)

PACKING QUANTITY: 20 PCS FINISHED GOODS PER TRAY

8 TRAYS (160 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. : A  |
| BILL          | 06-25-05 | gigabit MagJack® 1X4<br>0813-1X4T-23-F | 08131X4T23-F           | .X            |        | SCALE : N/A                  | SIZE : A4 |
| DRAWN BY      | DATE     |                                        |                        | .XX           |        | ⊕                            | PAGE : 6  |
| MEI           | 06-25-05 |                                        |                        | .XXX          | ±0.005 |                              |           |