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RoHS  
2002/95/EC



| LED1 POLARITY |        |        | LED2 POLARITY |        |        |              |
|---------------|--------|--------|---------------|--------|--------|--------------|
| PIN 13        | PIN 14 | COLOR  | PIN 15        | PIN 16 | PIN 17 | COLOR        |
| -             | +      | YELLOW | -             | +      | /      | ORANGE       |
| /             | /      | /      | /             | +      | -      | GREEN        |
|               |        |        | -             | +      | -      | MIXED YELLOW |

ELECTRICAL CHARACTERISTICS @ 25°C

URNS RATIO

|                                |                       |
|--------------------------------|-----------------------|
| TP1                            | 1CT : 1CT ±2%         |
| TP2                            | 1CT : 1CT ±2%         |
| TP3                            | 1CT : 1CT ±2%         |
| TP4                            | 1CT : 1CT ±2%         |
| QCL @ 100kHz/100mVRMS          | (0-70 Deg. C)         |
| 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) @100 OHMS ±15% |                       |
| 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 or 2250 VDC  
100% OF PRODUCT TESTED IN PRODUCTION

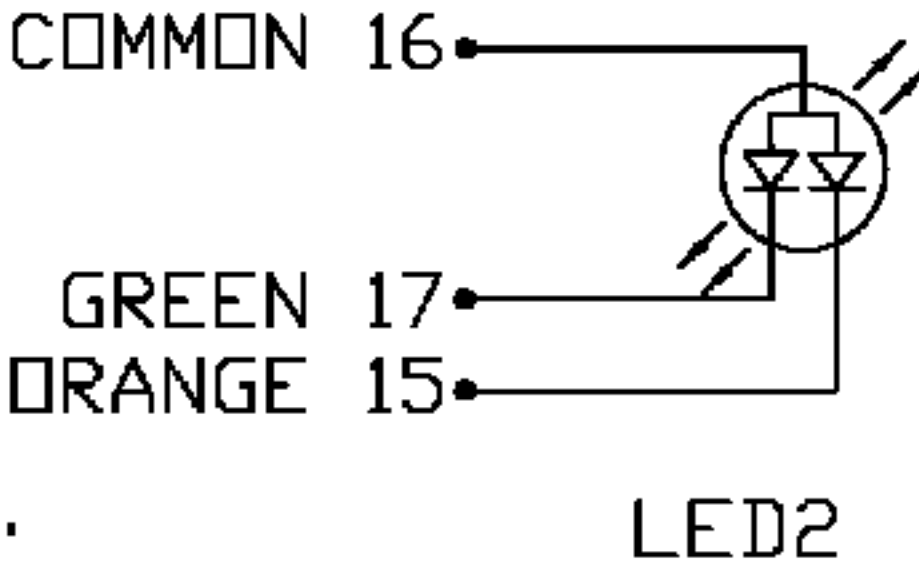
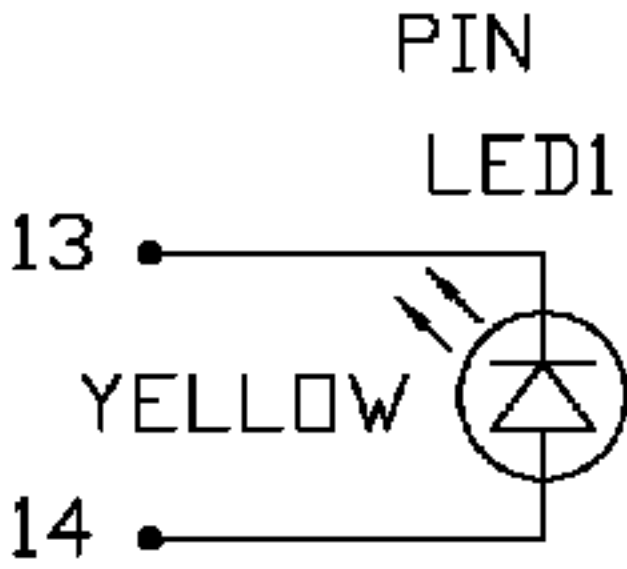
LED 1 (HI-TEMP)

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

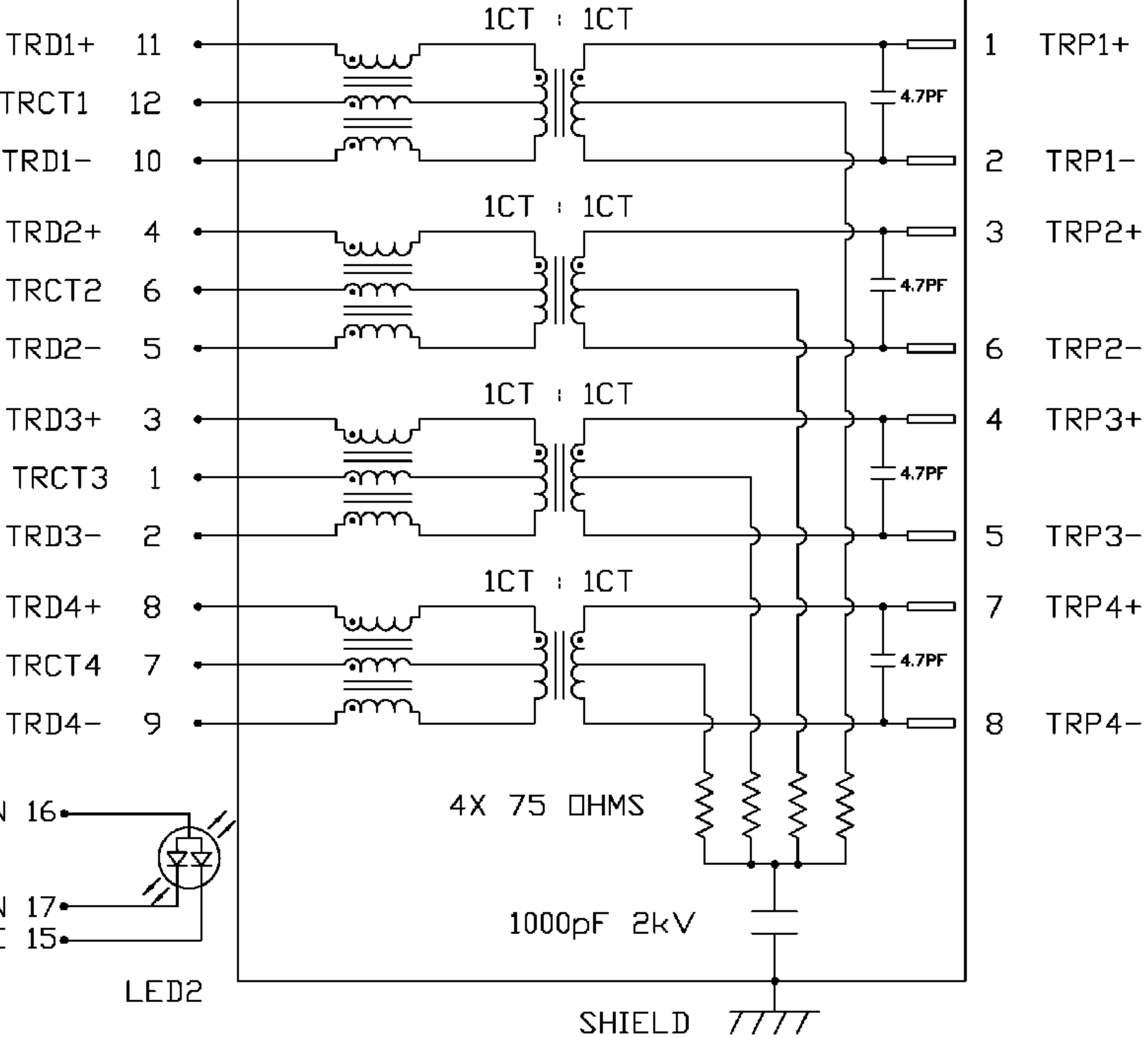
LED 2 (HI-TEMP)

VF (FORWARD VOLTAGE) IF=20mA YELLOW GREEN 2.2V TYP.  
λD (DOMINANT WAVELENGTH) IF=20mA AMBER 2.1V TYP.  
YELLOW GREEN 570nm TYP.  
AMBER 607nm TYP.

MIXED YELLOW DOES NOT HAVE SPECIFIC WAVELENGTH.



SCHEMATIC



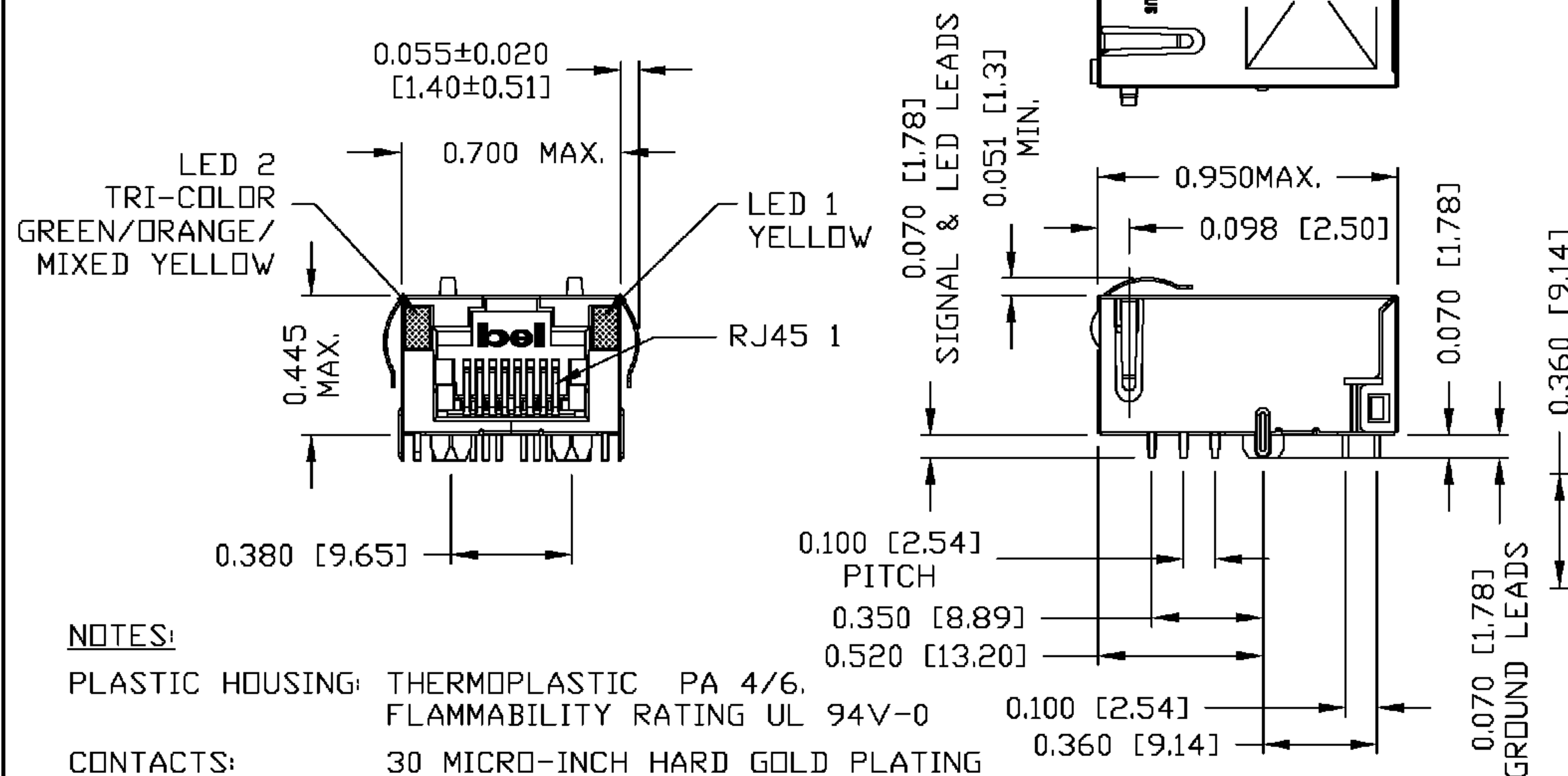
|               |          |                                         |                        |                                                                                       |     |                                                                                       |             |                                                                                                                                                   |           |
|---------------|----------|-----------------------------------------|------------------------|---------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| ORIGINATED BY | DATE     | TITLE                                   | PART NO. / DRAWING NO. | STANDARD DIM.                                                                         |     | [ ] METRIC DIM. AS REFERENCE                                                          |             | <br><small>COMPONENTS FOR A<br/>CONNECTED<br/>PLANET</small> |           |
| CHUNG         | 12-19-05 |                                         |                        | TOL. IN INCH                                                                          |     | UNIT : INCH [mm]                                                                      | REV. : E    |                                                                                                                                                   |           |
| DRAWN BY      | DATE     |                                         |                        | FILE NAME                                                                             | .X  |  | SCALE : N/A |                                                                                                                                                   | SIZE : A4 |
| DE            | 12-19-05 |                                         |                        |                                                                                       | .XX |                                                                                       | PAGE : 2    |                                                                                                                                                   |           |
|               |          | L8301J1D43E.DWG                         | .XXX                   |  |     |                                                                                       |             |                                                                                                                                                   |           |
|               |          | gigabit MagJack®<br>(Ultra Low Profile) |                        |                                                                                       |     |                                                                                       |             |                                                                                                                                                   |           |

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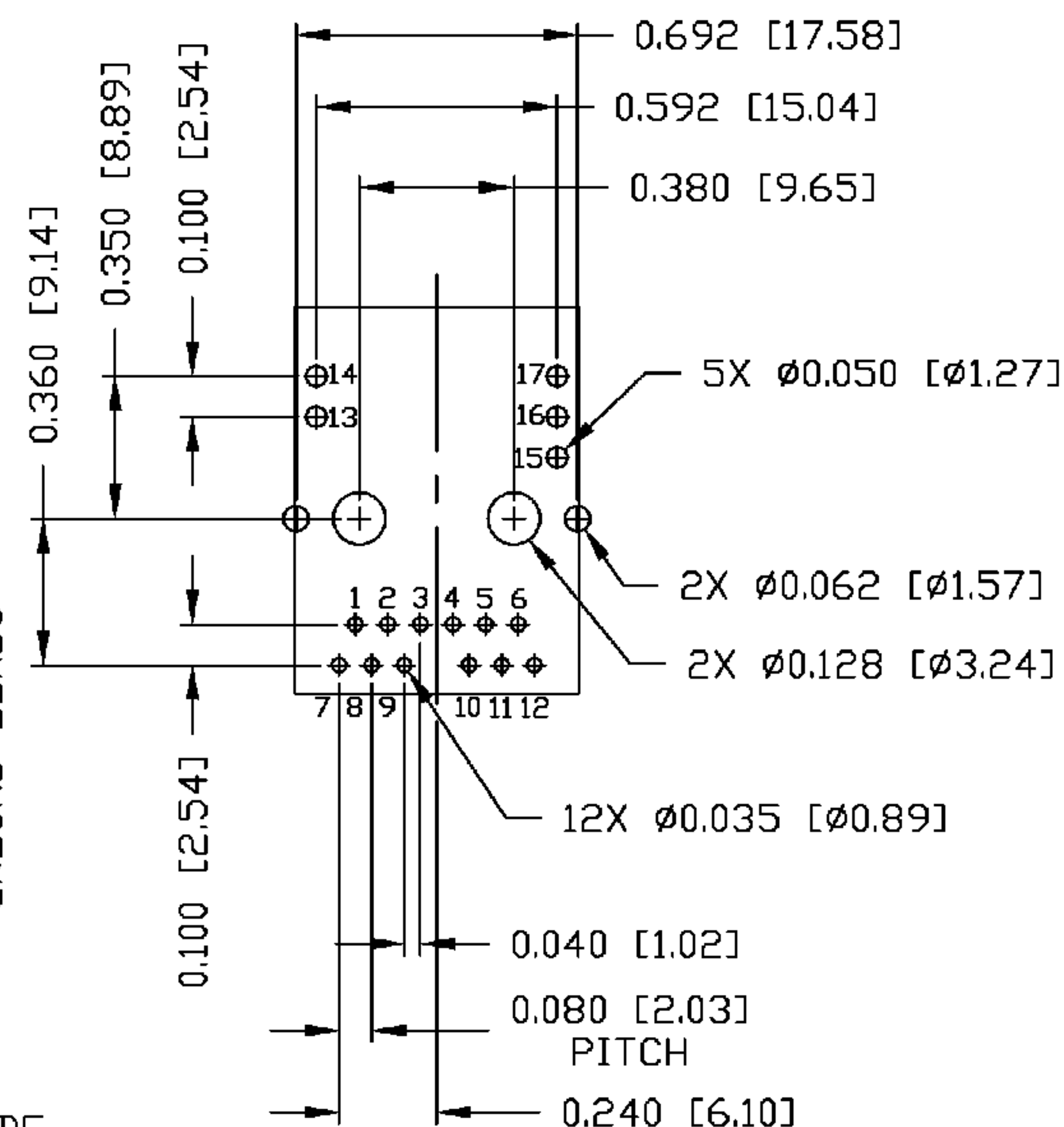


## MECHANICAL SPECIFICATION



## RECOMMENDED PCB FOOTPRINT

### COMPONENT SIDE VIEW



### NOTES:

- PLASTIC HOUSING: THERMOPLASTIC PA 4/6, FLAMMABILITY RATING UL 94V-0
- CONTACTS: 30 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. MARK PART WITH MFG. LOGO, MFG. NAME, PART NUMBER(L830-1J1D-43), AND DATE CODE.



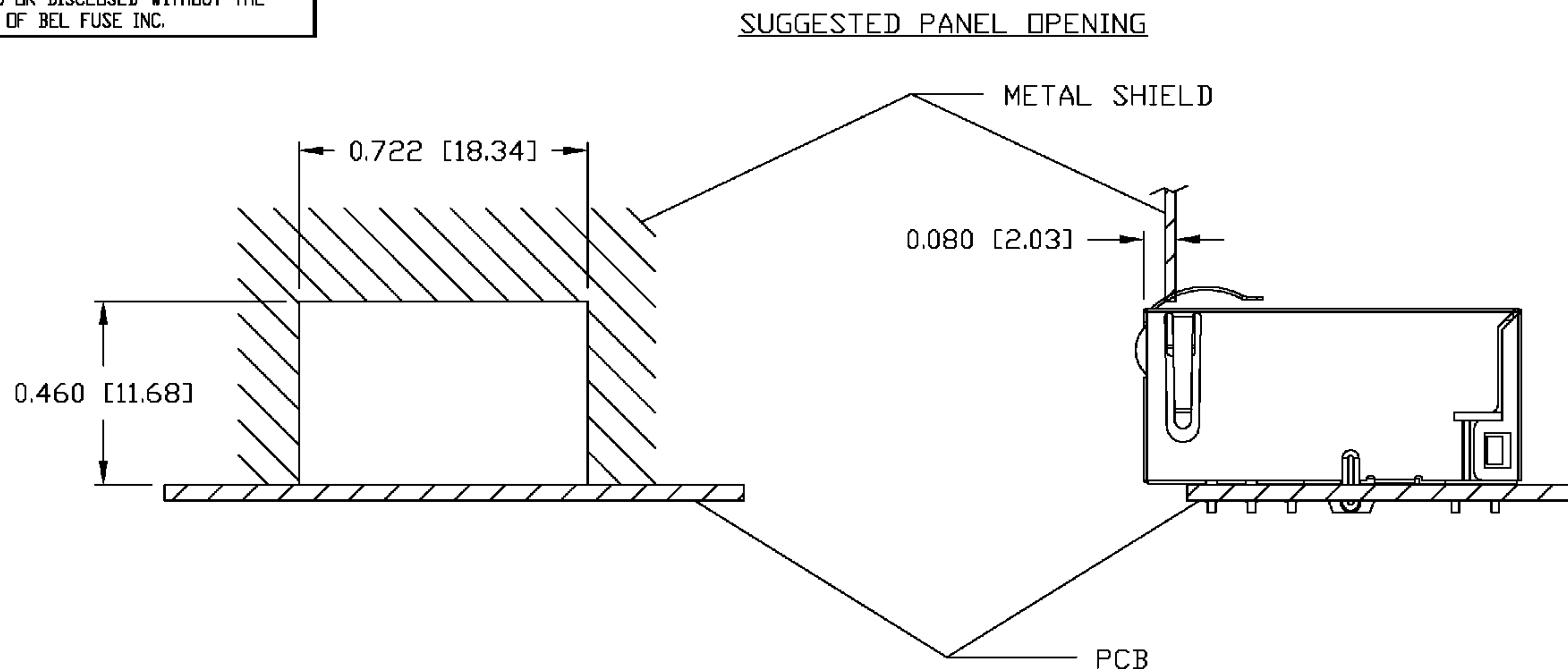
UL RECOGNIZED - FILE #E196366 AND E169987.

2. RoHS COMPLIANCE, PER EU DIRECTIVE 2002/95/EC.

|               |          |                                                      |                        |               |        |                                                                                       |           |
|---------------|----------|------------------------------------------------------|------------------------|---------------|--------|---------------------------------------------------------------------------------------|-----------|
| ORIGINATED BY | DATE     | TITLE<br><br>gigabit MagJack®<br>(Ultra Low Profile) | PART NO. / DRAWING NO. | STANDARD DIM. |        | [ ] METRIC DIM. AS REFERENCE                                                          |           |
| BANG          | 12-19-05 |                                                      | L830-1J1D-43           | TOL. IN INCH  |        | UNIT : INCH [mm]                                                                      | REV. : E  |
| DRAWN BY      | DATE     |                                                      | FILE NAME              | .X            |        | SCALE : N/A                                                                           | SIZE : A4 |
| LING          | 12-19-05 |                                                      | L8301J1D43E.DWG        | .XX           |        |  | PAGE : 3  |
|               |          |                                                      |                        | .XXX          | ±0.010 |                                                                                       |           |

  
COMPONENTS FOR A  
CONNECTED  
PLANET





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.

TRAY PACKING INFORMATION

PACKING TRAY : 0200-9999-E4 (TOP)  
0200-9999-E5 (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. : E  |                                                                                       |
| BANG          | 12-19-05 | gigabit MagJack®<br>(Ultra Low Profile) | L830-1J1D-43           | .X            |        | SCALE : N/A                  | SIZE : A4 |                                                                                       |
| DRAWN BY      | DATE     |                                         | FILE NAME              | .XX           |        |                              | PAGE : 4  |                                                                                       |
| LING          | 12-19-05 |                                         | L8301J1D43E.DWG        | .XXX          | ±0.004 |                              |           |                                                                                       |