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| LED1 POLARITY | | | LED2 POLARITY | | |
|---------------|--------|-------|---------------|--------|--------|
| PIN 13 | PIN 14 | COLOR | PIN 15 | PIN 16 | COLOR |
| - | + | GREEN | - | + | YELLOW |

RoHS
2002/95/EC



ELECTRICAL CHARACTERISTICS @ 25°C

URNS RATIO

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

OCL @ 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 |

CROSS TALK

| | |
|----------------|-------------|
| 1MHz - 60MHz | -35 dB MIN. |
| 60MHz - 100MHz | -25 dB MIN. |

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.

LED 1

VF (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP.

λD (DOMINANT WAVELENGTH) IF=20mA GREEN 565nm TYP.

LED 2

VF (FORWARD VOLTAGE) IF=20mA YELLOW 2.1V TYP.

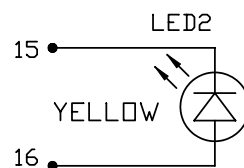
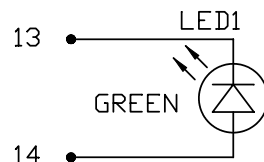
λD (DOMINANT WAVELENGTH) IF=20mA YELLOW 590nm TYP.

USB ELECTRICAL:

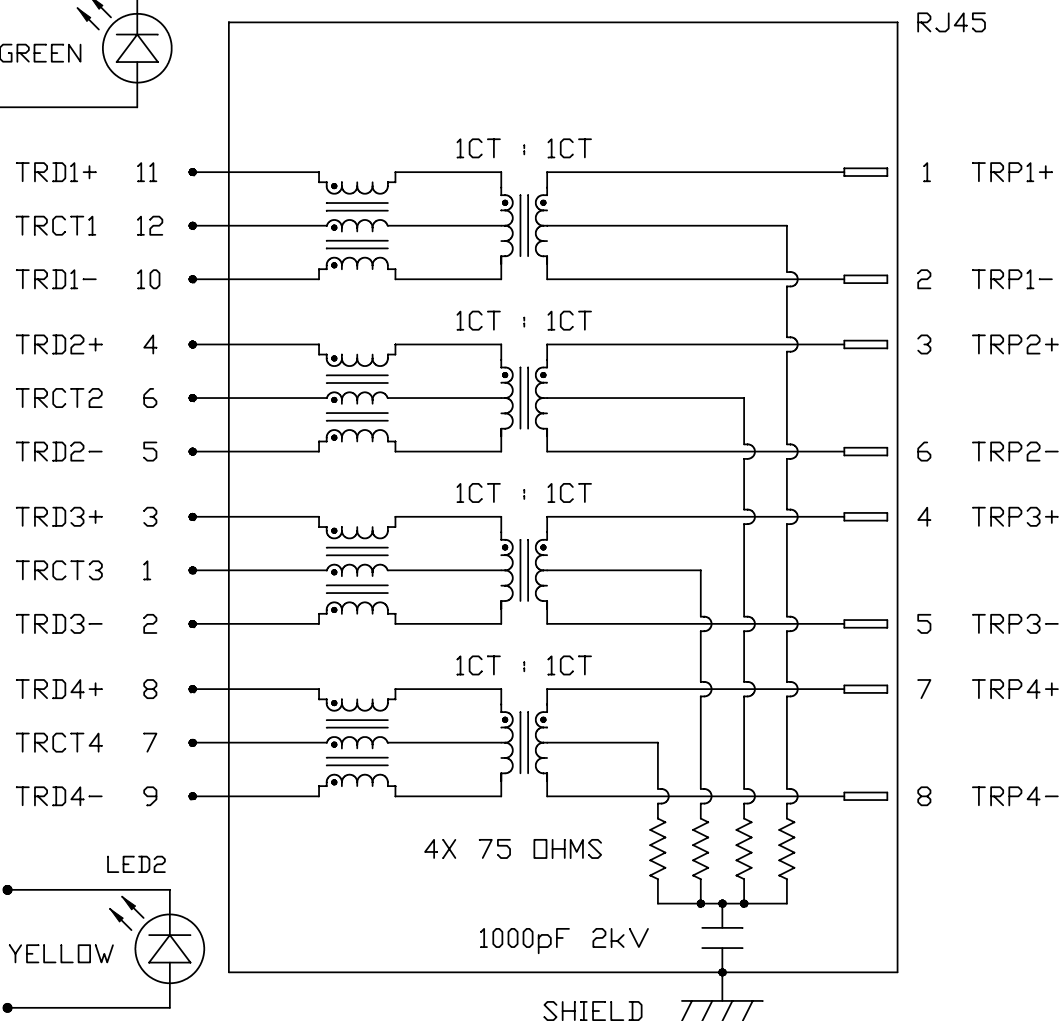
INSULATION RESISTANCE: 1000 MEGAΩ (MIN)

CONTACT RESISTANCE: 25 MILLIΩ (MAX)

DIELECTRIC WITHSTANDING: 750 VAC



SCHEMATIC



| | |
|----------------------|-------------|
| ORIGINATED BY | DATE |
| CHOW WANGCHUNG | 07-08-09 |
| DRAWN BY | DATE |
| LEE WEIDE | 07-08-09 |

| |
|---|
| TITLE |
| gigabit MagJack® Combo (single USB, 8 cores) 0821-1D1T-43-F PATENTED |

| |
|-------------------------------|
| PART NO. / DRAWING NO. |
| 08211D1T43-F |
| FILE NAME |
| 08211D1T43-F_B.DWG |

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

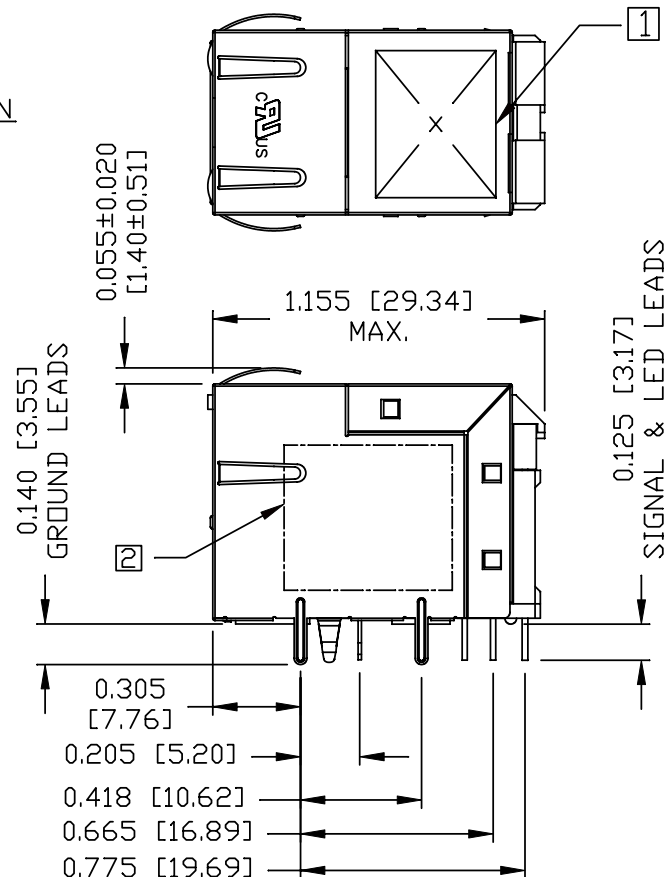
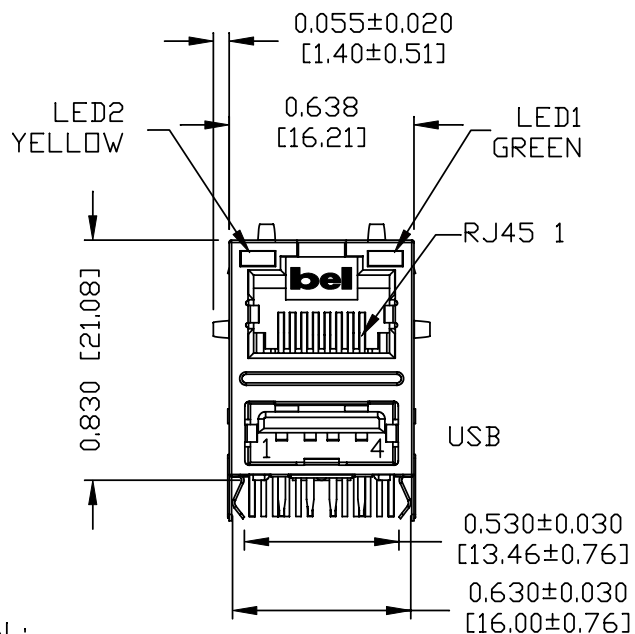
| |
|-------------------------------------|
| [] METRIC DIM. AS REFERENCE |
| UNIT : INCH [mm] |
| SCALE : N/A |
| REV. : B |
| SIZE : A4 |
| PAGE : 2 |



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MECHANICAL SPECIFICATION



RJ45 MECHANICAL:

PLASTIC HOUSING: THERMOPLASTIC PBT
 FLAMMABILITY RATING UL 94V-0
 CONTACT PLATING: 30 MICRO-INCH HARD GOLD PLATING
 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 AND DATE CODE.
 - 2. MARKING "PATENTED".
 - 3. JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS.
- UL US UL RECOGNIZED - FILE #E196366 AND E169987.

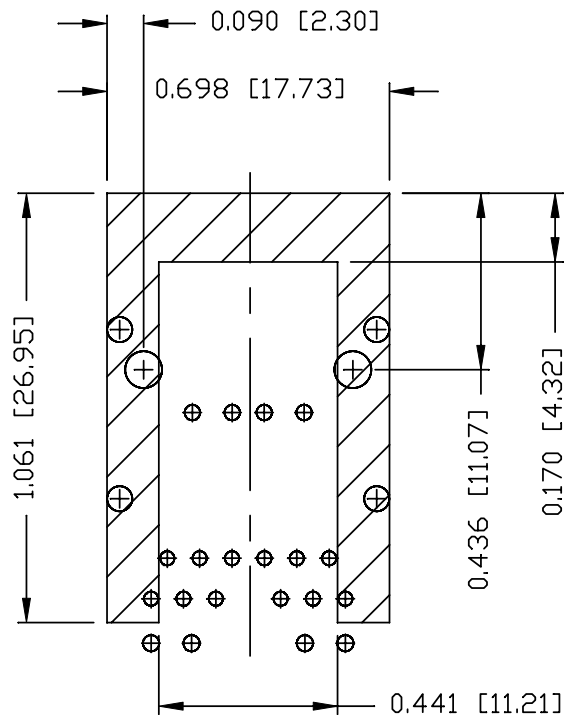
USB MECHANICAL:

MATING FORCE: 35 NEWTONS MAXIMUM
 UNMATING FORCE: 10 NEWTONS MINIMUM
 CONTACT: PROSPHER BRONZE,
 30 MICRO-INCH GOLD PLATING ON CONTACT AREA
 AND LEAD-FREE TIN ON SOLDER TAIL.
 4. RoHS COMPLIANCE, PER EU DIRECTIVE 2002/95/EC.
 5. THE PRODUCT IS PATENTED, THE PATENT NUMBER IS
 U.S. PAT. 5,736,910.

| | | | | | | | | |
|--------------------------|------------------|--|--|----------------------------|--------|------------------------------|-----------|--|
| ORIGINATED BY LIU QIN | DATE 07-08-09 | TITLE gigabit MagJack® Combo (single USB, 8 cores) | PART NO. / DRAWING NO. 08211D1T43-F | STANDARD DIM. TOL. IN INCH | | [] METRIC DIM. AS REFERENCE | | bel COMPONENTS FOR A CONNECTED PLANET |
| | | | | .X | | UNIT : INCH [mm] | REV. : B | |
| DRAWN BY XIAN JIAXIN | DATE 07-08-09 | 0821-1D1T-43-F PATENTED | FILE NAME 08211D1T43-F_B.DWG | .XX | | SCALE : N/A | SIZE : A4 | PAGE : 3 |
| | | | | .XXX | ±0.010 | | | |

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NOTES:

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

| | | | | | | | |
|--------------------------|------------------|--|--|-------------------------------|--------|------------------------------|-----------|
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| | | | | .X | | UNIT : INCH [mm] | REV. : B |
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| | | | | .XXX | ±0.004 | | PAGE : 4 |

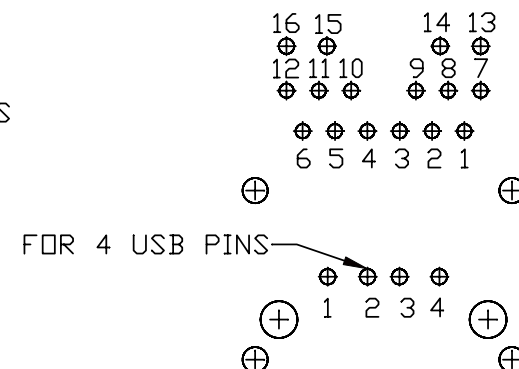
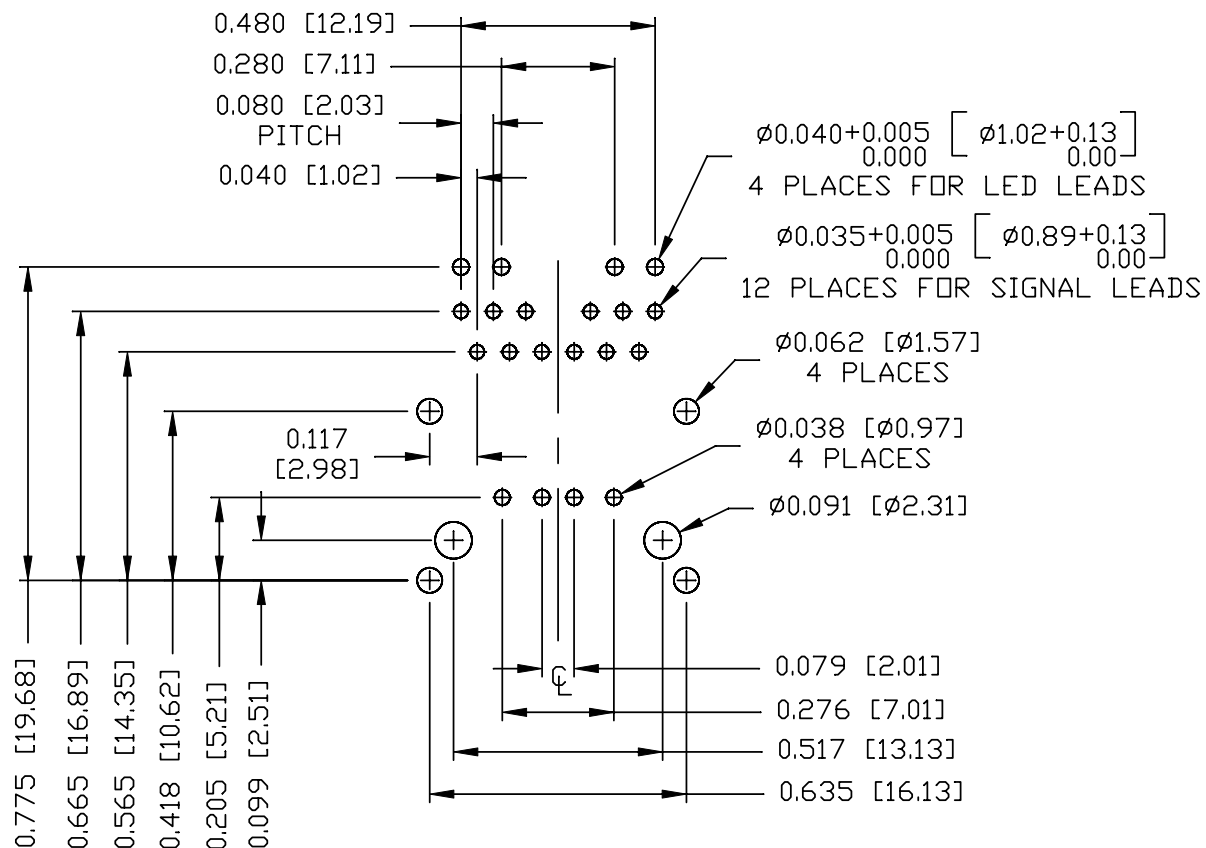


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RECOMMENDED PCB FOOTPRINT
COMPONENT SIDE VIEW



| | | | | | | | | |
|--------------------------|------------------|--|--|--|-------------------------------|--------|---------------------------------|-----------------------------------|
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| | | | FILE NAME 08211D1T43-F_B.DWG | | .X .XX .XXX | ±0.004 | UNIT : INCH [mm] SCALE : N/A | REV. : B SIZE : A4 PAGE : 5 |

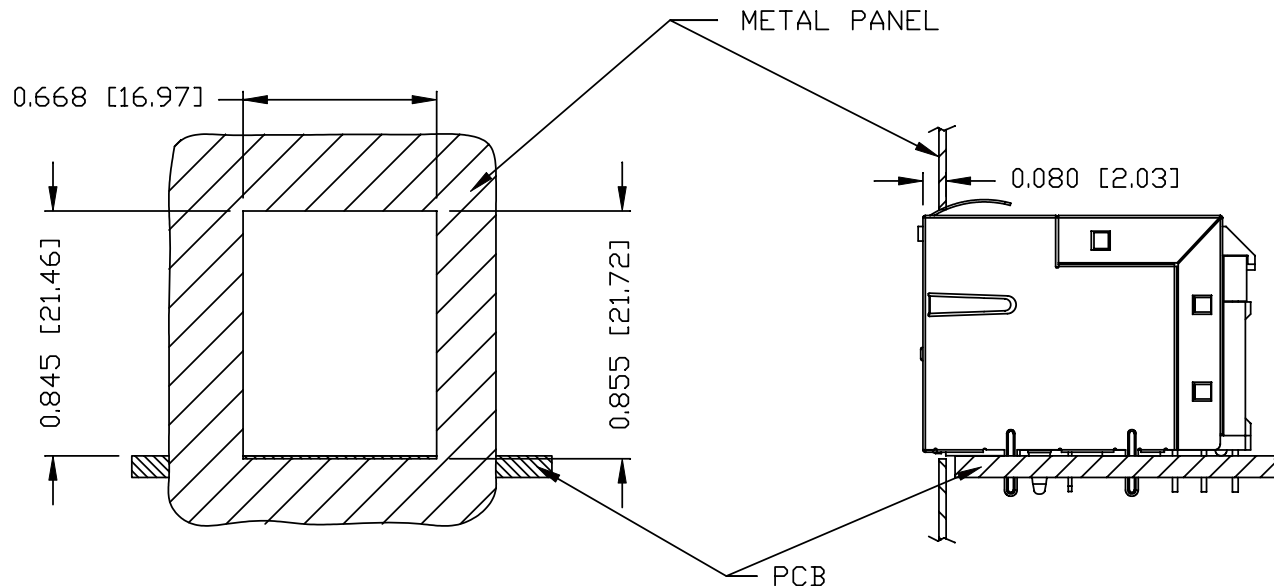


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SUGGESTED PANEL OPENING



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 : 0200-0148-48 (TOP)

0200-0148-49 (BOTTOM)

PACKING QUANTITY : 60 PCS FINISHED GOODS PER TRAY

8 TRAYS (480 PCS FINISHED GOODS) PER CARTON BOX

NOTE : CARDBOARDS ARE PLACED BETWEEN LAYERS OF PACKING TRAY INSIDE CARTON BOX (INCLUDE THE UPPERMOST AND LOWERMOST TRAY)

| | | | | | | | | |
|--------------------------|------------------|--|--|----------------------------|--------|------------------------------|-----------|--|
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| DRAWN BY XIAN JIAXIN | DATE 07-08-09 | | FILE NAME 08211D1T43-F_B.DWG | .XX | | SCALE : N/A | SIZE : A4 | PAGE : 6 |
| | | | | .XXX | ±0.004 | | | |