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| LED 1 POLARITY |        |        | LED 2 POLARITY |        |        |
|----------------|--------|--------|----------------|--------|--------|
| PIN 17         | PIN 18 | COLOR  | PIN 19         | PIN 20 | COLOR  |
| -              | +      | YELLOW | +              | -      | ORANGE |
|                |        |        | -              | +      | GREEN  |

PRELIMINARY



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 (4CHANNEL)

|                            |            |
|----------------------------|------------|
| (-40°C - 85°C)             | 180µH MIN. |
| 19mA DC BIAS(-40°C - 85°C) | 120µH MIN. |

RET. LOSS (MIN)

|              |                             |
|--------------|-----------------------------|
| 1MHz-40MHz   | -18 dB MIN                  |
| 40MHz-250MHz | -18+10LOG10(f/40MHz) dB MIN |

CM TO CM REJ

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

CM TO DM REJ

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

HIPOT (Isolation Voltage):

2250 VDC

100% OF PRODUCTION TESTED TO COMPLY

WITH IEEE 802.3 ISOLATION REQUIREMENTS

BALANCED DC LINE CURRENT

600mA MAX. CONTINUOUS  
1.2A MAX. FOR 200 MILLISECONDS

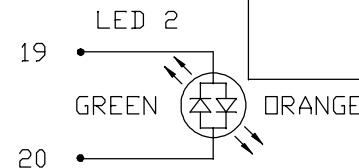
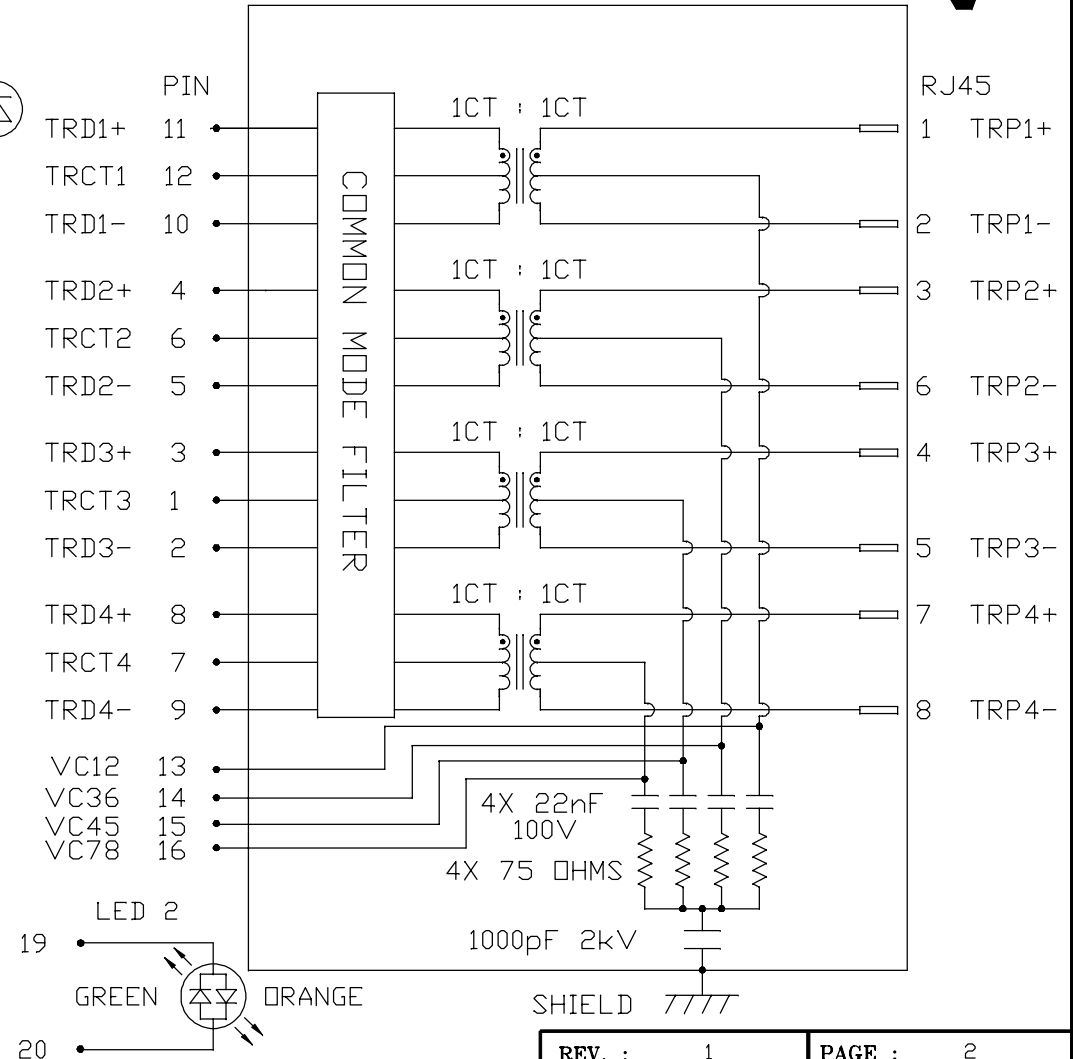
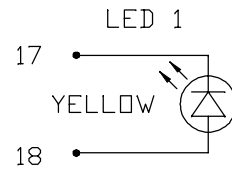
OPERATING TEMPERATURE: -40°C TO 85°C

LED 1

|                                      |         |        |            |
|--------------------------------------|---------|--------|------------|
| V <sub>F</sub> (FORWARD VOLTAGE)     | IF=20mA | YELLOW | 2.1V TYP.  |
| λ <sub>D</sub> (DOMINANT WAVELENGTH) | IF=20mA | YELLOW | 590nm TYP. |

LED 2

|                                      |         |        |            |
|--------------------------------------|---------|--------|------------|
| V <sub>F</sub> (FORWARD VOLTAGE)     | IF=20mA | GREEN  | 2.2V TYP.  |
|                                      |         | ORANGE | 2.0V TYP.  |
| λ <sub>D</sub> (DOMINANT WAVELENGTH) | IF=20mA | GREEN  | 570nm TYP. |
|                                      |         | ORANGE | 605nm TYP. |



REV. : 1 PAGE : 2

ORIGINATED BY  
CHOW WANGCHUNG  
DATE 2021-05-27

DRAWN BY  
TANG YUAN  
DATE 2021-05-27

TITLE  
5 Gigabit MagJack®  
(4PPoE, Extended Temperature)  
PATENTED

PART NO. / DRAWING NO.  
0826-1X1T-JKB-F

FILE NAME  
0826-1X1T-JKB-F\_1.DWG

STANDARD DIM. [ ] METRIC DIM.  
TOL. IN INCH AS REF.

|      |                  |
|------|------------------|
| .X   | UNIT : INCH [mm] |
| .XX  | SCALE : N/A      |
| .XXX | SIZE : A4        |

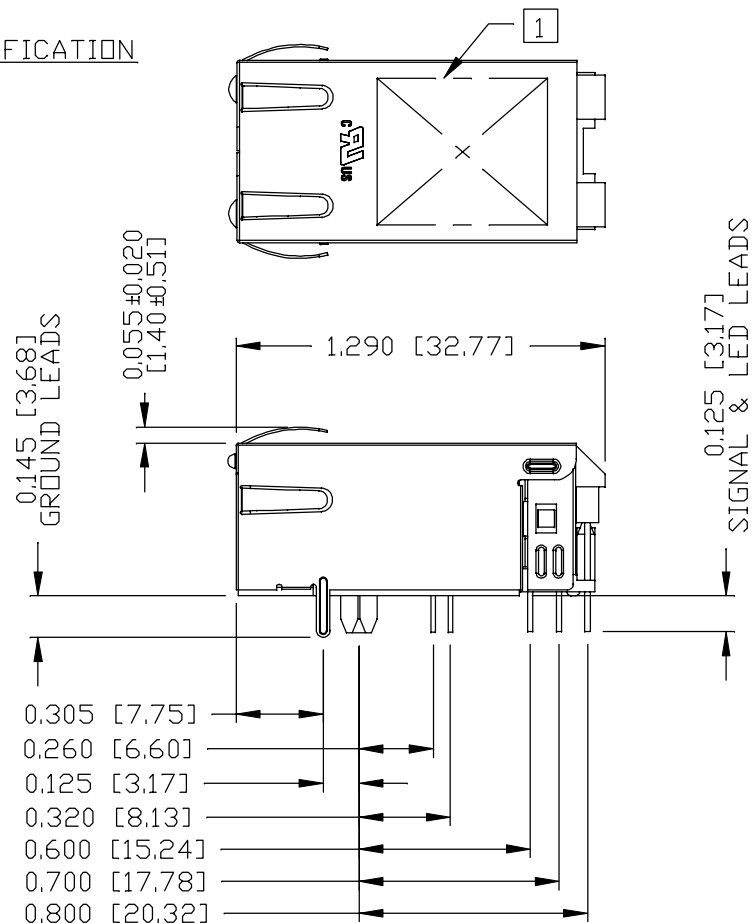
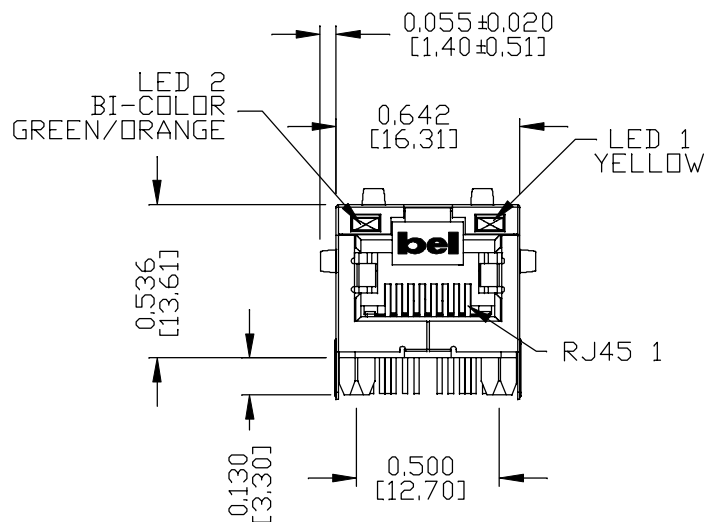


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PRELIMINARY

MECHANICAL SPECIFICATION

RoHS



NOTES:

- PLASTIC HOUSING: THERMOPLASTIC PA, BLACK.  
FLAMMABILITY RATING UL 94V-0
- CONTACTS: 50 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT.
- OUTPUT PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.  
100 MICRO-INCH MIN MATTE TIN, PINS ARE SOLDER DIPPED.
- 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.
2. THE PRODUCT IS RoHS COMPLIANT.

UL RECOGNIZED - FILE #E196366 AND E169987.

3. JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS.
4. THE PRODUCT IS PATENTED, THE PATENT NUMBER IS U.S. PAT. 7,123,117.
5. THE PART IS RECOMMENDED FOR WAVE SOLDERING. THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS 260°C MAX. AND 10 SECONDS MAX..

|                             |  |
|-----------------------------|--|
| ORIGINATED BY<br>LI QUANKUN | TITLE<br>5 Gigabit MagJack®<br>(4PPoE, Extended Temperature) |
| DATE 2021-05-27             |  |
| DRAWN BY<br>OLIVER ZHANG    | PATENTED   |
| DATE 2021-05-27             |  |

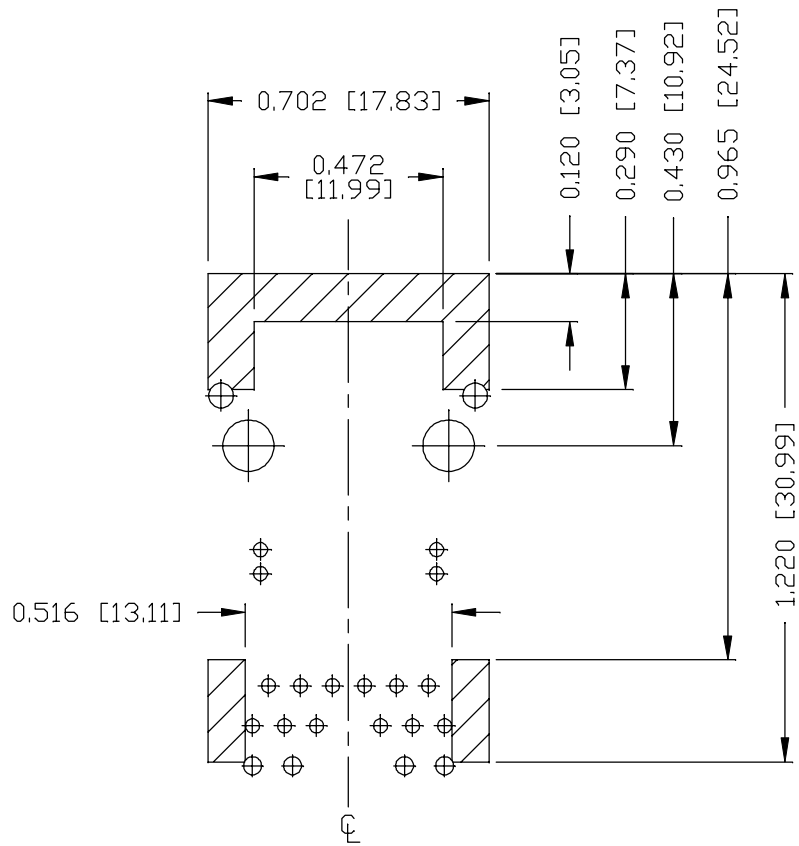
|   |                               |  |
|---|-------------------------------|--|
| PART NO. / DRAWING NO.<br>0826-1X1T-JKB-F | STANDARD DIM.<br>TOL. IN INCH | [ ] METRIC DIM.<br>AS REF.                   |
| FILE NAME<br>0826-1X1T-JKB-F_1.DWG        | .X<br>.XX<br>.XXX             | UNIT : INCH [mm]<br>SCALE : N/A<br>SIZE : A4 |

|          |          |
|----------|----------|
| REV. : 1 | PAGE : 3 |
|----------|----------|

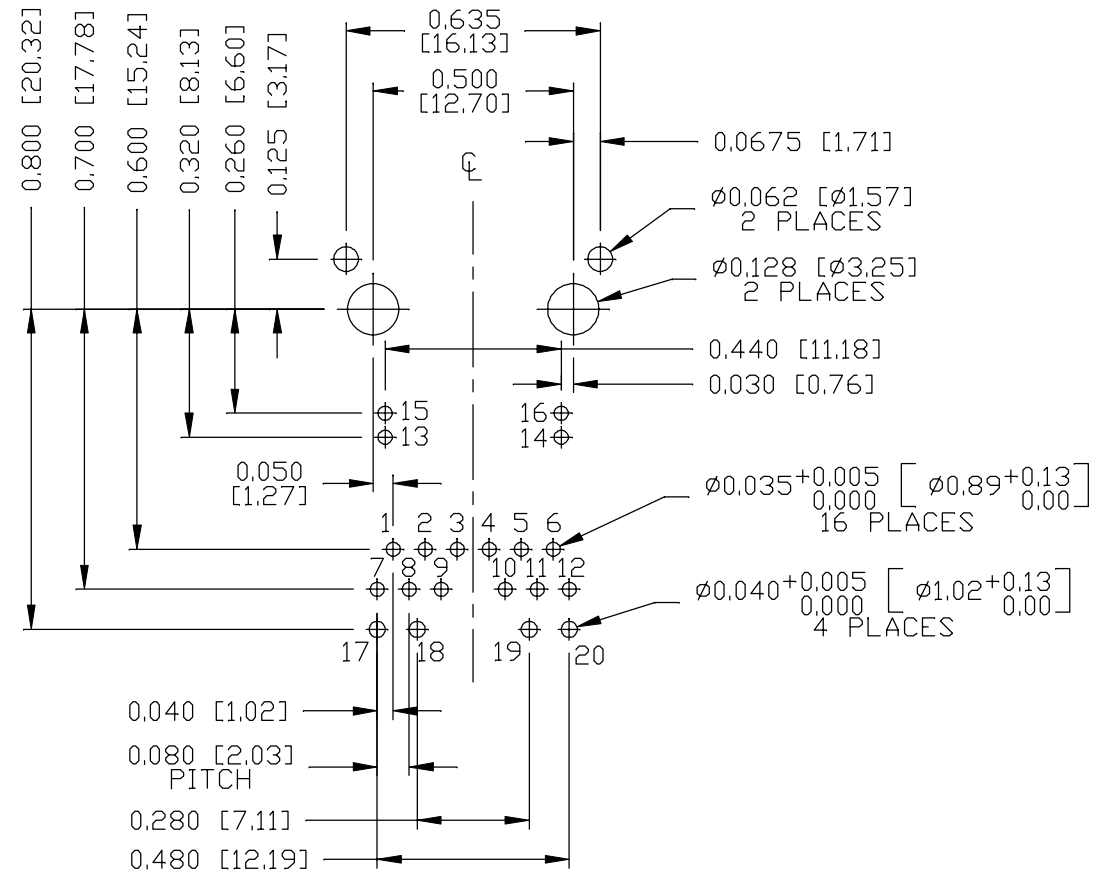
|                    |  |
|--------------------|--|
| <p>a bel group</p> |  |
|--------------------|--|

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PRELIMINARY



RECOMMENDED PCB FOOTPRINT  
COMPONENT SIDE VIEW



NOTES

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

REV. : 1 PAGE : 4

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LI QUANKUN  
DATE 2021-05-27  
DRAWN BY  
OLIVER ZHANG  
DATE 2021-05-27

TITLE  
5 Gigabit MagJack®  
(4PPoE, Extended Temperature)  
PATENTED

PART NO. / DRAWING NO.  
0826-1X1T-JKB-F  
FILE NAME  
0826-1X1T-JKB-F\_1.DWG

|                               |                            |
|-------------------------------|----------------------------|
| STANDARD DIM.<br>TOL. IN INCH | [ ] METRIC DIM.<br>AS REF. |
| .X                            | UNIT : INCH [mm]           |
| .XX                           | SCALE : N/A                |
| .XXX                          | ±0.004                     |
|                               | SIZE : A4                  |

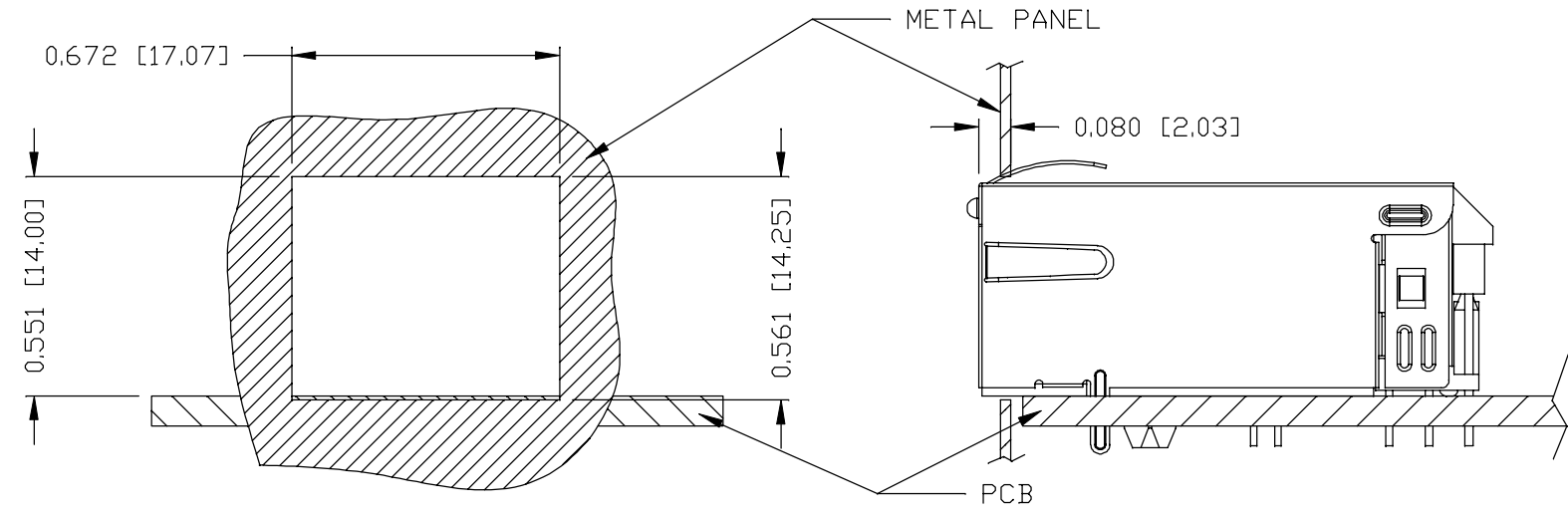


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PRELIMINARY



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-F6 (TOP)  
0200-9999-F7 (BOTTOM)

PACKING QUANTITY : 40 PCS FINISHED GOODS PER TRAY  
10 TRAYS (400 PCS FINISHED GOODS) PER CARTON BOX

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

REV. : 1 PAGE : 5

|   |   |  |   |   |
|---|---|--|---|---|
| <b>ORIGINATED BY</b><br>LI QUANKUN<br><b>DATE</b> 2021-05-27<br><b>DRAWN BY</b><br>OLIVER ZHANG<br><b>DATE</b> 2021-05-27 | <b>TITLE</b><br><br>5 Gigabit MagJack®<br>(4PPoE, Extended Temperature)<br>PATENTED | <b>PART NO. / DRAWING NO.</b><br>0826-1X1T-JKB-F | <b>STANDARD DIM.</b><br><b>TOL. IN INCH</b> | <input type="checkbox"/> METRIC DIM.<br>AS REF. |
|   |   | <b>FILE NAME</b><br>0826-1X1T-JKB-F_1.DWG        | .X<br>.XX<br>.XXX                           | UNIT : INCH [mm]<br>SCALE : N/A                 |
|   |   | ±0.005   | <input checked="" type="checkbox"/>         | SIZE : A4                                       |



DC002(2)120214

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