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

PRELIMINARY

RoHS

## ELECTRICAL CHARACTERISTICS @ 25°C

TURNS RATIO
- TP1 1CT : 1CT ±2%
- TP2 1CT : 1CT ±2%
- TP3 1CT : 1CT ±2%
- TP4 1CT : 1CT ±2%

OCL @ 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

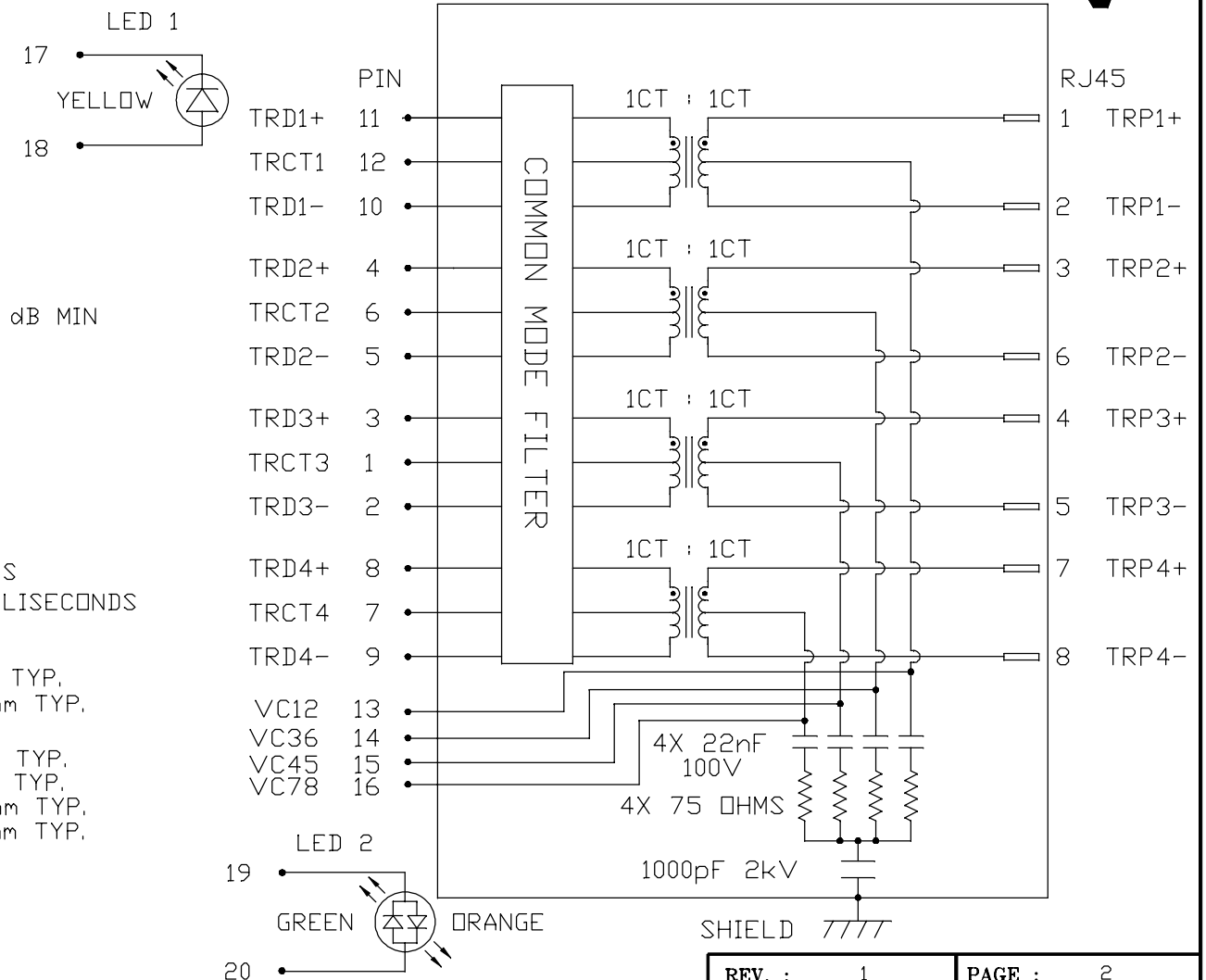
BALANCED DC LINE CURRENT 600mA MAX. CONTINUOUS
1.2A MAX. FOR 200 MILLISECONDS

OPERATING TEMPERATURE: -40°C TO 85°C

LED 1
- VF (FORWARD VOLTAGE) IF=20mA YELLOW 2.1V TYP.
- λD (DOMINANT WAVELENGTH) IF=20mA YELLOW 590nm TYP.

LED 2
- VF (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP.
  ORANGE 2.0V TYP.
- λD (DOMINANT WAVELENGTH) IF=20mA GREEN 570nm TYP.
  ORANGE 605nm TYP.

SCHEMATIC




REV. : 1 | PAGE : 2

| | | | | |
|---|---|---|---|---|
| ORIGINATED BY CHOW WANGCHUNG<br>DATE 2021-05-27 | TITLE<br>5 Gigabit MagJack®<br>(4PPoE, Extended Temperature)<br>PATENTED | PART NO. / DRAWING NO.<br>0826-1X1T-JKB-F | STANDARD DIM. TOL. IN INCH | [ ] METRIC DIM. AS REF. |
| DRAWN BY TANG YUAN<br>DATE 2021-05-27 | | FILE NAME<br>0826-1X1T-JKB-F_1.DWG | .X / .XX / .XXX | UNIT : INCH [mm]<br>SCALE : N/A<br>SIZE : A4 |

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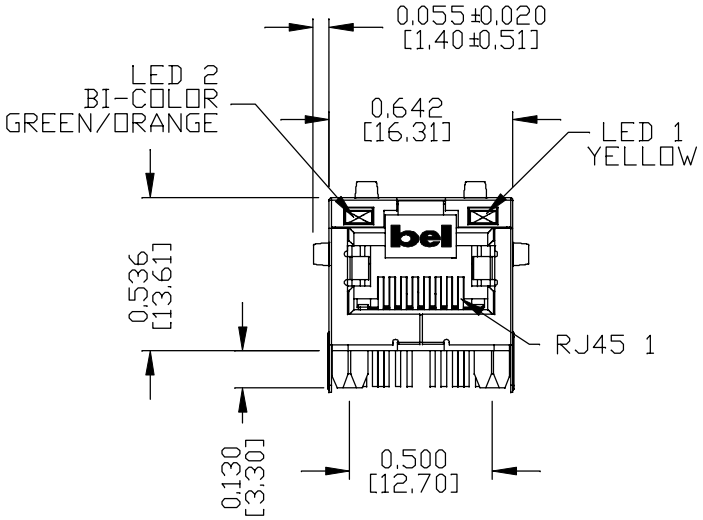
Please read our datasheet & drawing disclaimer here.

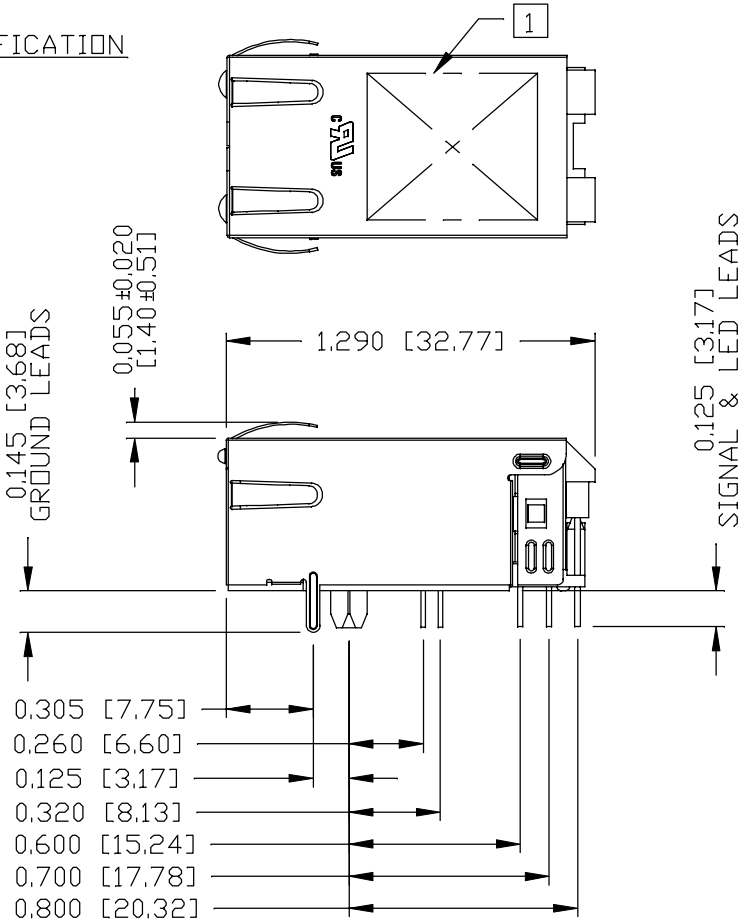
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# MECHANICAL SPECIFICATION

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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.
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.,

c UL us UL RECOGNIZED - FILE #E196366 AND E169987.

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

| | | | |
|---|---|---|---|
| ORIGINATED BY: LI QUANKUN<br>DATE: 2021-05-27 | TITLE: 5 Gigabit MagJack®<br>(4PPoE, Extended Temperature)<br>PATENTED | PART NO. / DRAWING NO.: 0826-1X1T-JKB-F<br>FILE NAME: 0826-1X1T-JKB-F_1.DWG | STANDARD DIM. TOL. IN INCH: .X, .XX, .XXX ±0.010<br>[ ] METRIC DIM. AS REF.<br>UNIT : INCH [mm]<br>SCALE : N/A<br>SIZE : A4 |
| DRAWN BY: OLIVER ZHANG<br>DATE: 2021-05-27 | | | |

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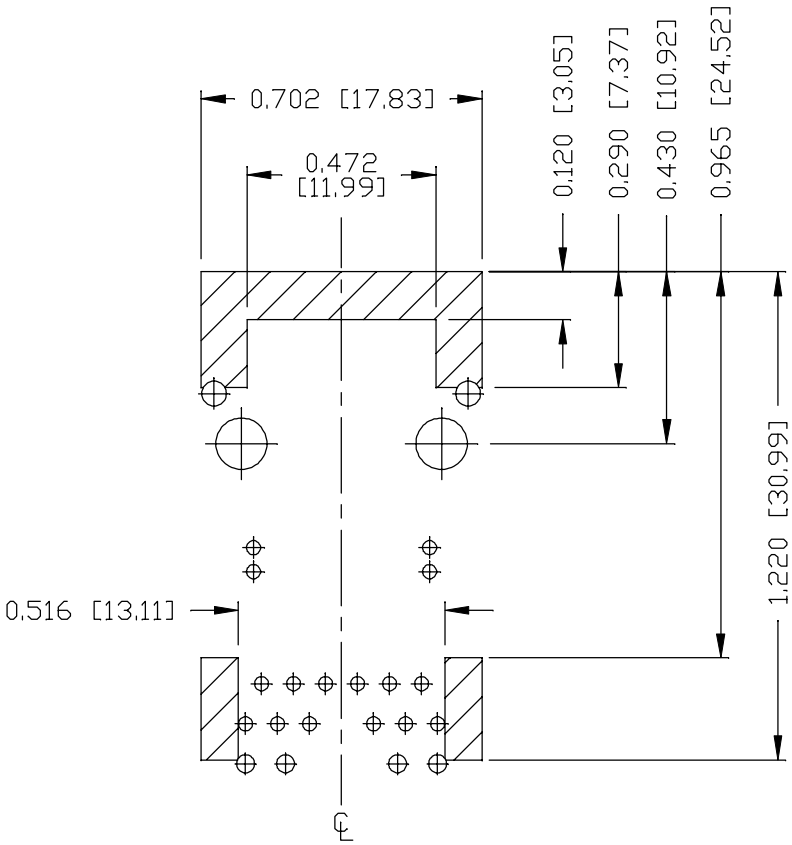


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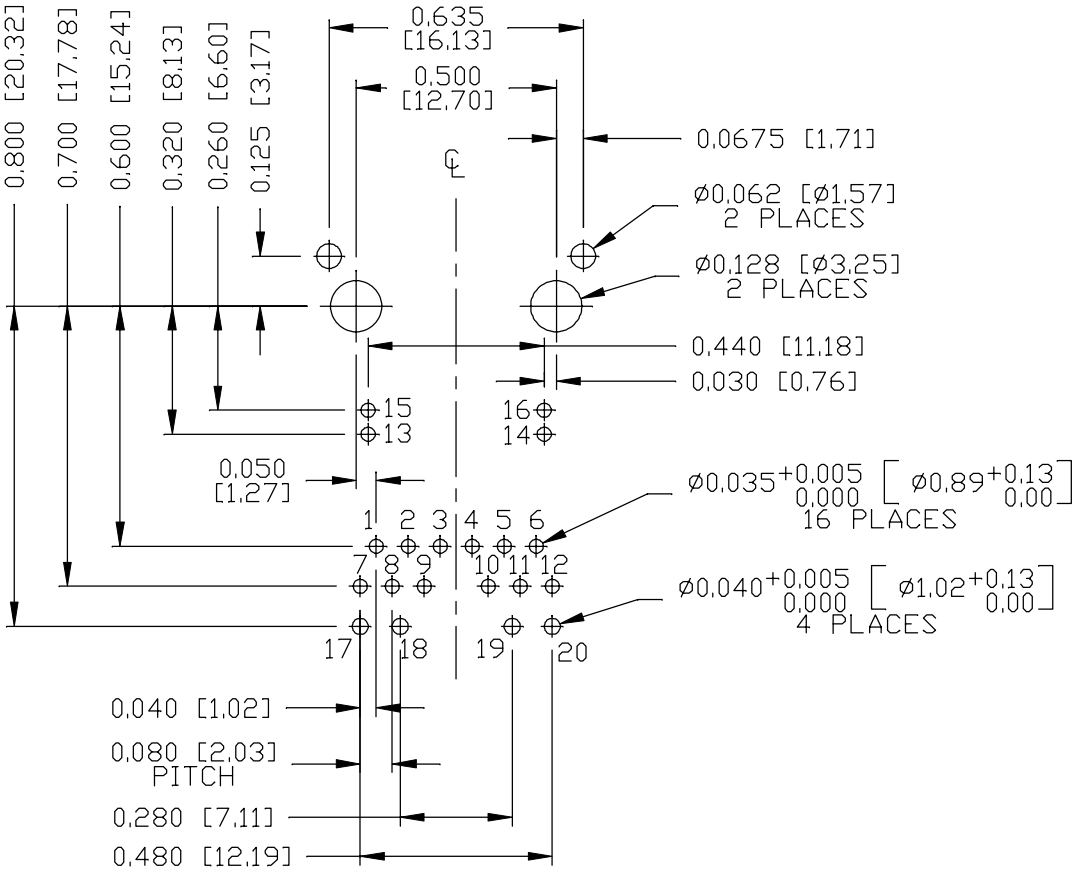
PRELIMINARY

RoHS




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.

| | | | | | |
|---|---|---|---|---|---|
| ORIGINATED BY<br>LI QUANKUN<br>DATE 2021-05-27 | TITLE<br>5 Gigabit MagJack ®<br>(4PPoE, Extended Temperature)<br>PATENTED | PART NO. / DRAWING NO.<br>0826-1X1T-JKB-F | STANDARD DIM. TOL. IN INCH | [ ] METRIC DIM. AS REF. | REV. : 1 / PAGE : 4 |
| DRAWN BY<br>OLIVER ZHANG<br>DATE 2021-05-27 | | FILE NAME<br>0826-1X1T-JKB-F_1.DWG | .X<br>.XX<br>.XXX ±0.004 | UNIT : INCH [mm]<br>SCALE : N/A<br>SIZE : A4 | bel MAGNETIC SOLUTIONS<br>a bel group |



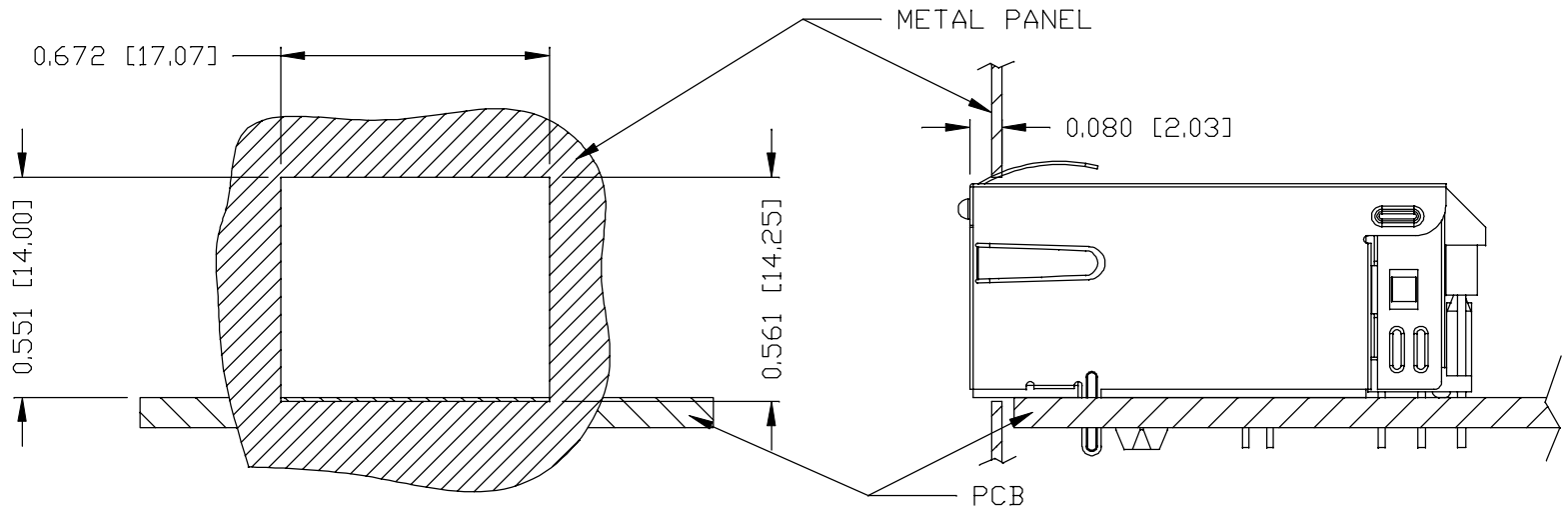
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## SUGGESTED PANEL OPENING




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)



| | | | | | |
|---|---|---|---|---|---|
| ORIGINATED BY<br>LI QUANKUN<br>DATE 2021-05-27 | TITLE<br>5 Gigabit MagJack ®<br>(4PPoE, Extended Temperature)<br>PATENTED | PART NO. / DRAWING NO.<br>0826-1X1T-JKB-F | STANDARD DIM. TOL. IN INCH | | [ ] METRIC DIM. AS REF. |
| DRAWN BY<br>OLIVER ZHANG<br>DATE 2021-05-27 | | FILE NAME<br>0826-1X1T-JKB-F_1.DWG | .X | | UNIT : INCH [mm] |
| | | | .XX | | SCALE : N/A |
| | | | .XXX | ±0,005 | SIZE : A4 |

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