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## ELECTRICAL CHARACTERISTICS @ 25°C

|                            |                       |
|----------------------------|-----------------------|
| Turns Ratio                |                       |
| TX                         | 1CT : 1               |
| RX                         | 1CT : 1               |
| DCL @ 100kHz/100mVRMS      |                       |
| 8mA DC BIAS                | 350µH MIN.            |
| INS. LOSS                  |                       |
| 1MHz TO 100MHz             | -1.0 dB MAX           |
| RET. LOSS (MIN)            |                       |
| 1MHz-30MHz                 | -18 dB                |
| 30MHz-60MHz                | -18+20LOG(F/30MHz) dB |
| 60MHz-80MHz                | -12 dB                |
| CROSS TALK (TX - RX)       |                       |
| 500kHz-1MHz                | -70 dB MIN            |
| 10 MHz                     | -50 dB MIN            |
| 30 MHz                     | -45 dB MIN            |
| 50 MHz                     | -40 dB MIN            |
| 100 MHz                    | -35 dB MIN            |
| CM TO CM REJ               |                       |
| 100kHz-1MHz                | -70 dB MIN            |
| 10 MHz                     | -47 dB MIN            |
| 30 MHz                     | -42 dB MIN            |
| 60 MHz                     | -37 dB MIN            |
| 100 MHz                    | -30 dB MIN            |
| CM TO DM REJ               |                       |
| 100kHz-1MHz                | -70 dB MIN            |
| 10 MHz                     | -60 dB MIN            |
| 30 MHz                     | -50 dB MIN            |
| 60 MHz                     | -45 dB MIN            |
| 100 MHz                    | -40 dB MIN            |
| HIPOT (Isolation Voltage): | 1500 Vrms             |

100% OF PRODUCTION TESTED TO COMPLY WITH IEEE 802.3 ISOLATION REQUIREMENTS.

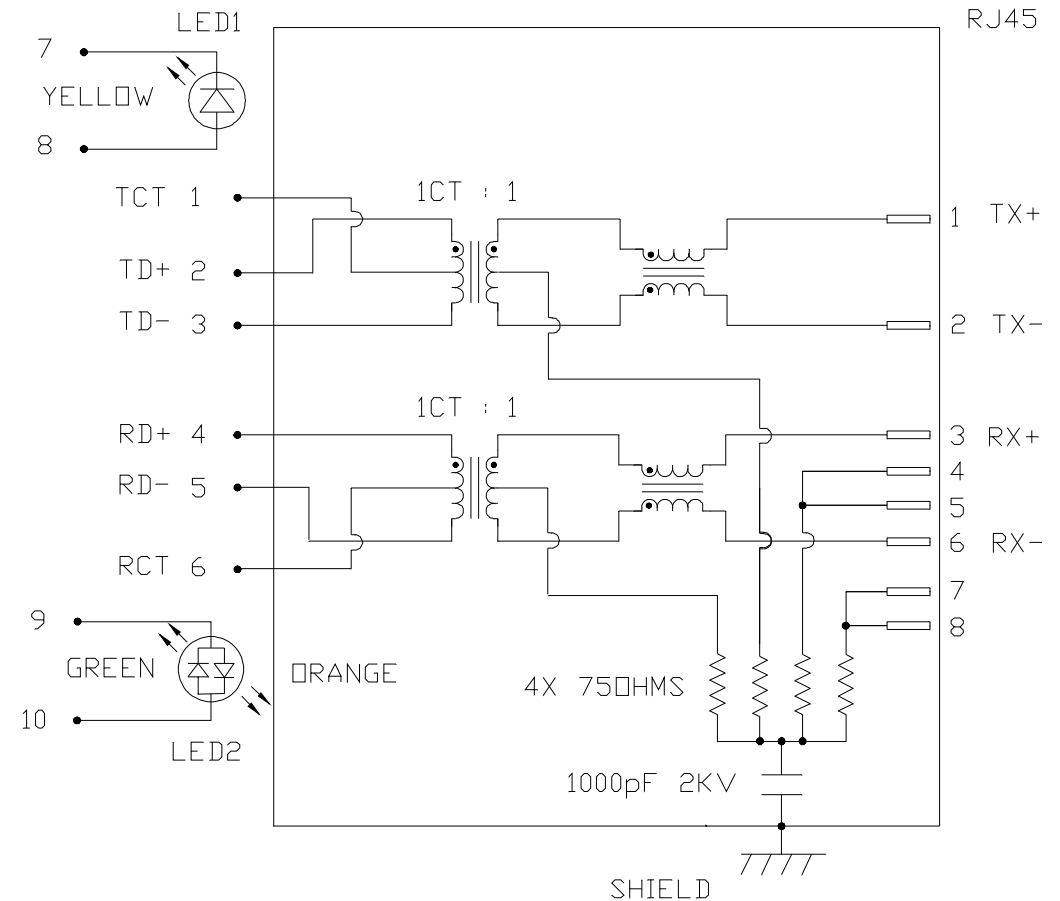
|      |                          |         |        |            |
|------|--------------------------|---------|--------|------------|
| LED1 | VF (FORWARD VOLTAGE)     | IF=20mA | YELLOW | 2.1V TYP.  |
| LED1 | λD (DOMINANT WAVELENGTH) | IF=20mA | YELLOW | 590nm TYP. |
| LED2 | VF (FORWARD VOLTAGE)     | IF=20mA | ORANGE | 2.0V TYP.  |
| LED2 | λD (DOMINANT WAVELENGTH) | IF=20mA | ORANGE | 605nm TYP. |
|      |                          |         | GREEN  | 2.2V TYP.  |
|      |                          |         | GREEN  | 570nm TYP. |

OPERATING TEMPERATURE: -40°C TO +85°C.

| LED1 POLARITY |       |        | LED2 POLARITY |        |        |
|---------------|-------|--------|---------------|--------|--------|
| PIN 7         | PIN 8 | COLOR  | PIN 9         | PIN 10 | COLOR  |
| -             | +     | YELLOW | +             | -      | ORANGE |
|               |       |        | -             | +      | GREEN  |

## SCHEMATIC

RoHS



ORIGINATED BY  
CHOW WANCHUNG  
DATE 2018-03-18

DRAWN BY  
XIE YIMING  
DATE 2018-03-18

TITLE  
MagJack®  
(4 Cores, MDIX, CM Termination)  
08B0-1X1T-36-F

PART NO. / DRAWING NO.  
08B01X1T36-F

FILE NAME  
08B01X1T36-F\_E.DWG

STANDARD DIM.  
TOL. IN INCH

.X

.XX

.XXX

[ ] METRIC DIM.  
AS REF.

UNIT : INCH [mm]

SCALE : N/A

SIZE : A4

REV. : E

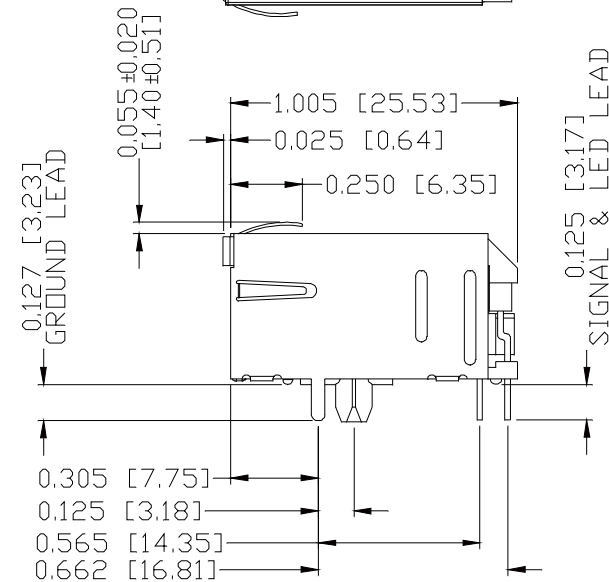
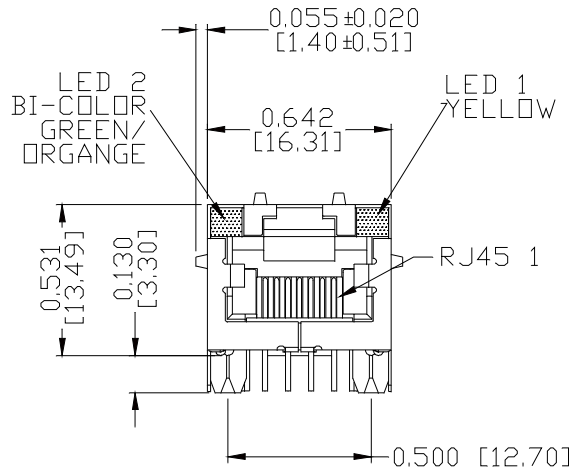
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## MECHANICAL SPECIFICATION

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### NOTES:

- PLASTIC HOUSING: THERMOPLASTIC PBT, BLACK  
FLAMMABILITY RATING UL 94V-0
- CONTACTS PLATING: 15 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT
- PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.  
100 MICRO-INCH MIN MATTE TIN. PINS ARE SOLDER DIPPED.
- METAL SHIELD: PRE-PLATED NICKEL ON COPPER ALLOY.  
(ALL GROUND LEADS ARE SOLDER DIPPED)

1. MARK PART WITH MFG LOGO, MFG NAME, PART NUMBER AND DATE CODE.

UL RECOGNIZED - FILE #E196366 AND E169987.

2. THE PRODUCT IS RoHS COMPLIANT.

3. JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS,  
PART 68 SUBPART F.

5. THE PART IS RECOMMENDED FOR WAVE SOLDERING.  
THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS  
260°C MAX AND 10 SECONDS MAX.

ORIGINATED BY  
ANTON LIAO  
DATE 2018-03-18

DRAWN BY  
JESSE LI  
DATE 2018-03-18

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08B0-1X1T-36-F

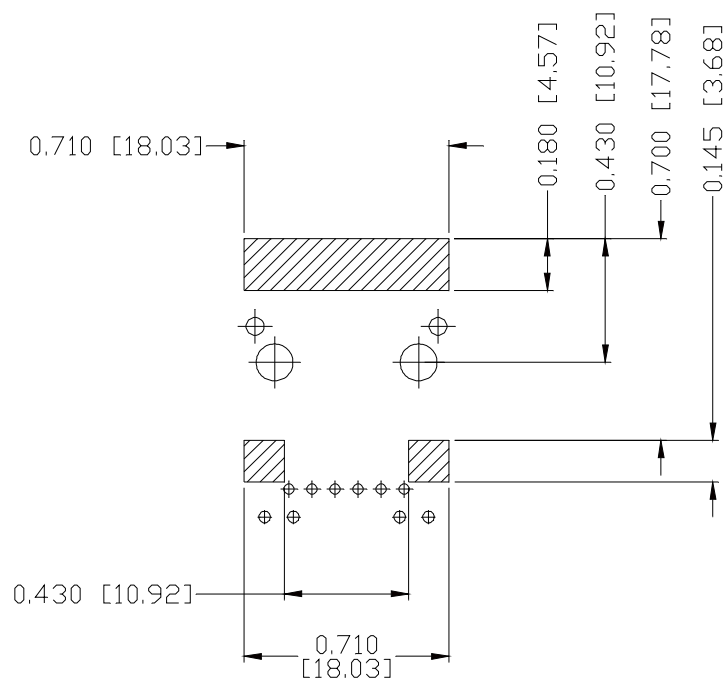
PART NO. / DRAWING NO.  
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FILE NAME  
08B01X1T36-F\_E.DWG

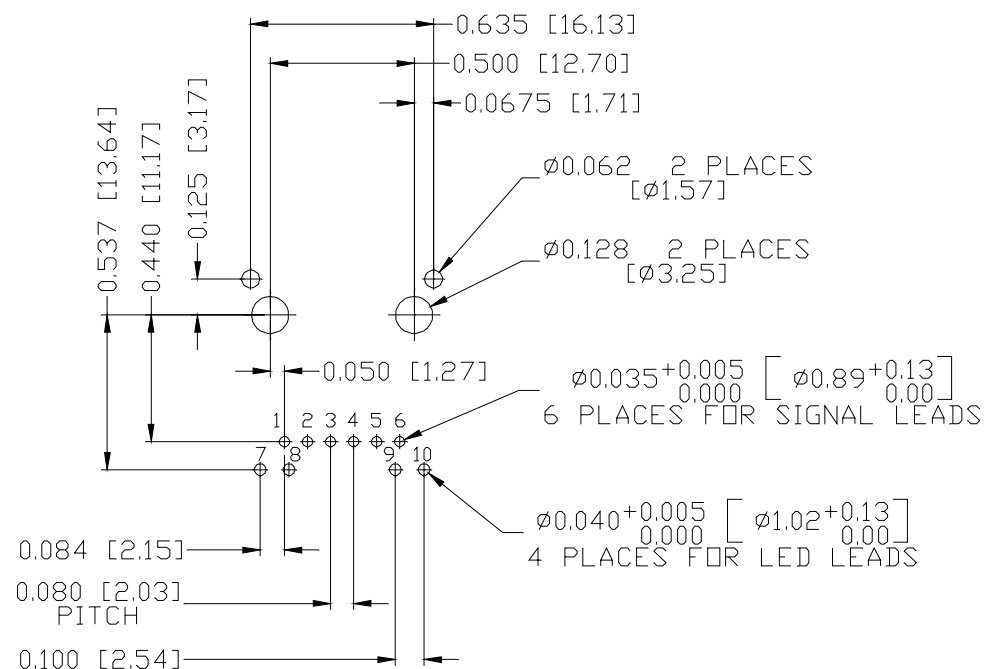
| STANDARD DIM.<br>TOL. IN INCH | [ ] METRIC DIM.<br>AS REF. |
|-------------------------------|----------------------------|
| .X                            | UNIT : INCH [mm]           |
| .XX                           | SCALE : N/A                |
| .XXX                          | ±0.010                     |
|                               | SIZE : A4                  |

REV. : E PAGE : 3





# 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.

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FILE NAME  
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STANDARD DIM.  
TOL. IN INCH

.X  
.XX  
.XXX

[ ] METRIC DIM.  
AS REF.

UNIT : INCH [mm]  
SCALE : N/A  
SIZE : A4

REV. : E

PAGE : 4

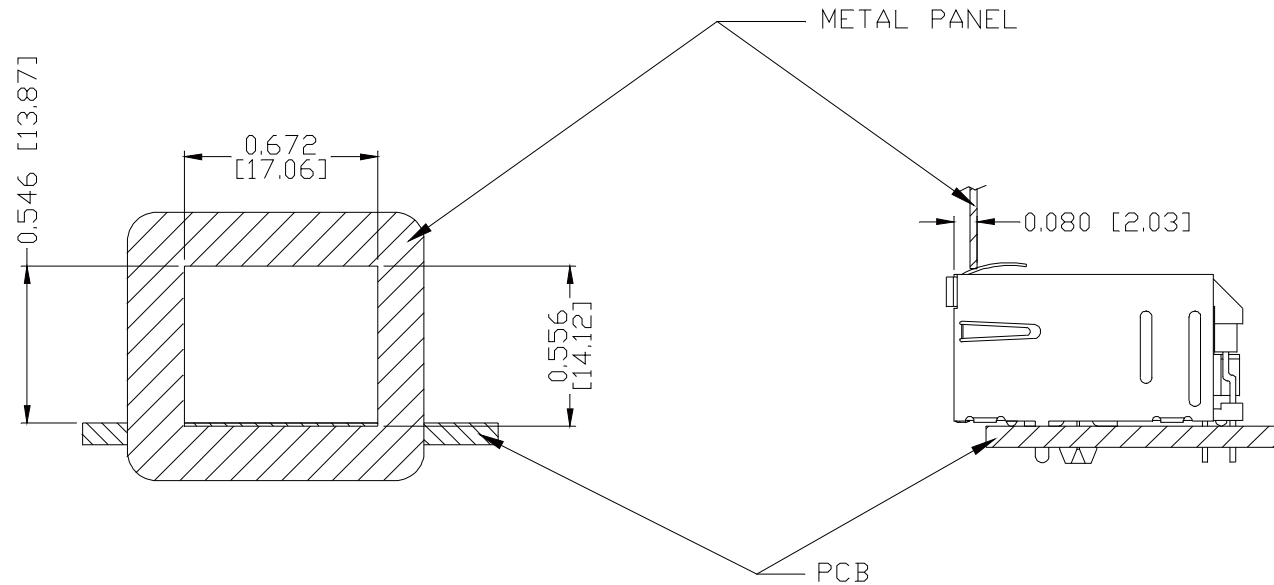


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### SUGGESTED PANEL OPENING



#### 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-D4(TOP)

0200-9999-D5(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)

|                                                              |  |                                                             |  |                                               |  |                                                        |  |                                                                                |  |                                                                                                                                    |                 |
|--------------------------------------------------------------|--|-------------------------------------------------------------|--|-----------------------------------------------|--|--------------------------------------------------------|--|--------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <b>ORIGINATED BY</b><br>ANTON LIAO<br><b>DATE</b> 2018-03-18 |  | <b>TITLE</b><br>MagJack®<br>(4 Cores, MDIX, CM Termination) |  | <b>PART NO. / DRAWING NO.</b><br>08B01X1T36-F |  | <b>STANDARD DIM. TOL. IN INCH</b><br>.X<br>.XX<br>.XXX |  | <b>[ ] METRIC DIM. AS REF.</b><br>UNIT : INCH [mm]<br>SCALE : N/A<br>SIZE : A4 |  | <b>REV. :</b> E                                                                                                                    | <b>PAGE :</b> 5 |
| <b>DRAWN BY</b><br>JESSE LI<br><b>DATE</b> 2018-03-18        |  | <b>FILE NAME</b><br>08B01X1T36-F_E.DWG                      |  |                                               |  |                                                        |  |                                                                                |  |  <b>bel</b> MAGNETIC SOLUTIONS<br>a bel group |                 |