

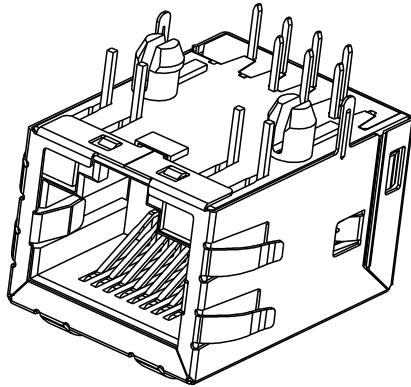
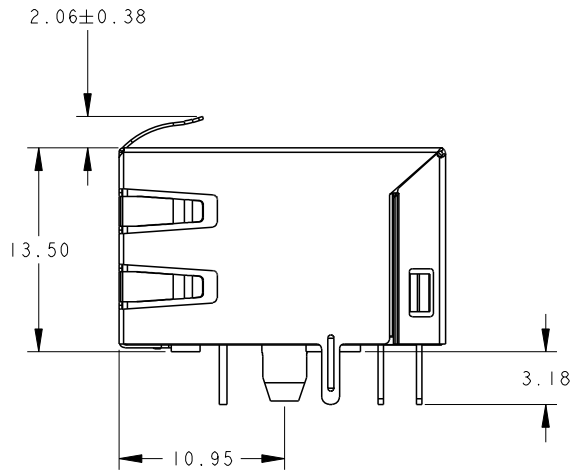
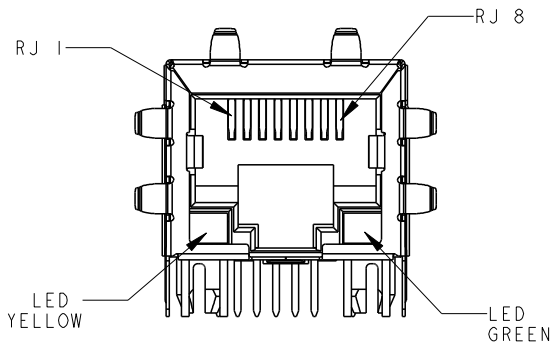
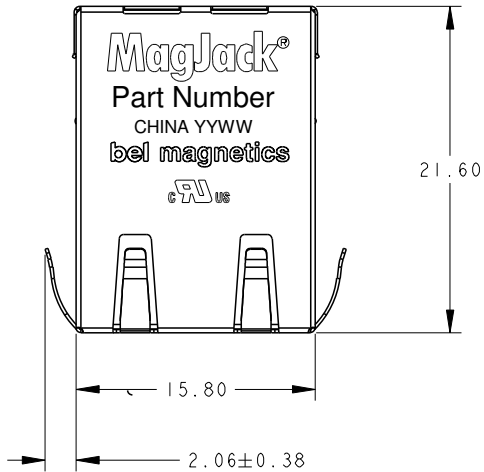
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NOTE:

- CONNECTOR MATERIALS:  
HOUSING: THERMOPLASTIC UL94 V-0  
CONTACT: COPPER ALLOY  
SHIELD: STAINLESS STEEL, SUS304, 1.27um NICKEL PLATING, TIN DIPPING ON GROUND PINS  
CONTACT PLATING: 1.27um MIN. OVERALL NICKEL UNDERPLATE AND SELECTIVE 1.27um HARD GOLD PLATING AT MATING AREA
- RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68 SUB PART F.
- THE PRODUCT IS RoHS COMPLIANT.
- THE PART IS RECOMMENDED FOR WAVE SOLDERING:  
THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS 260°C MAX AND 10 SECONDS MAX.



P01-0002-01

PART NUMBER

|                      |            |
|----------------------|------------|
| DRAWN                | 2023-11-10 |
| TOWER YU / FRANK LIU |            |
| CHECKED              | 2023-11-10 |
| BILL LIU             |            |
| APPROVED             | 2023-11-10 |
| TONY YUAN            |            |

TITLE  
IX1 10/100BT MAGJACK  
TAB DOWN, SHIELDED

|             |              |
|-------------|--------------|
| DRAWING NO. | P01-0002     |
| FILE NAME   | P01-0002.DRW |

|                                    |       |        |       |
|------------------------------------|-------|--------|-------|
| UNLESS OTHERWISE NOTED, DIM. TOL.: |       |        |       |
| X.                                 | ±0.25 | SIZE:  | A4    |
| .X                                 | ±0.25 | UNIT:  | mm    |
| .XX                                | ±0.25 | SCALE: | NA    |
| .XXX                               | ±0.25 | PAGE:  | 1 / 4 |
|                                    |       | REV.:  | 1     |

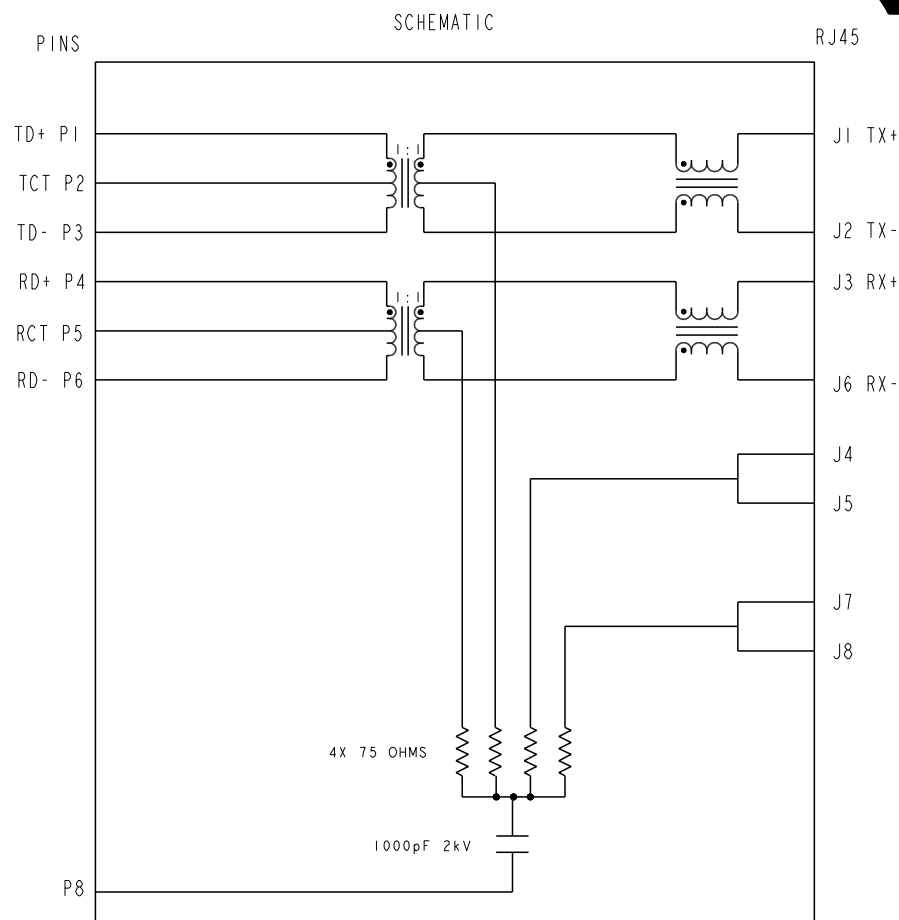


ELECTRICAL CHARACTERISTICS @25°C

## 1. MAGNETICS

- APPLICATION: 10/100 BASE-T
- IMPEDANCE: 100 OHMS
- TURNS RATIO (CHIP:CABLE): TX=1:1, RX=1:1
- OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS,  
8mADC BIAS FROM 0°C TO 70°C, TX AND RX
- PERFORMANCE @ 25°C:
  - INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
  - RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 30MHz  
18-20LOG(f/80)dB MIN FROM 30.1MHz TO 60MHz  
12dB MIN FROM 60.1MHz TO 80MHz
  - CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz  
33-20LOG(f/50)dB MIN FROM 40.1MHz TO 100MHz
  - COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz
- ISOLATION VOLTAGE: 2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC

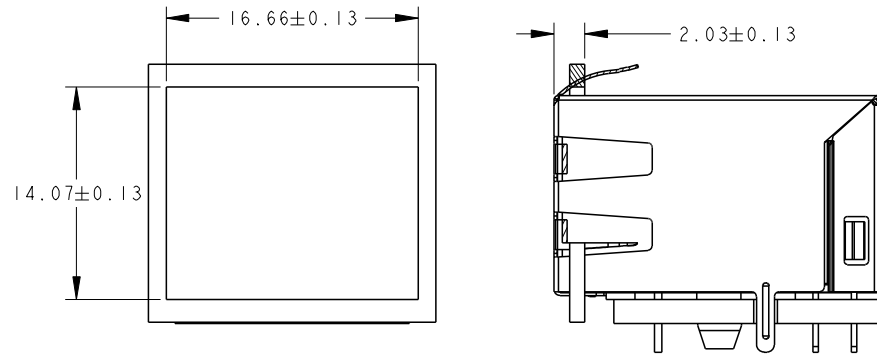
## 2. OPERATING TEMPERATURE: FROM 0°C TO 70°C



## NOTES

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

|                      |            |   |                               |                                     |       |   |  |   |
|----------------------|------------|---|-------------------------------|-------------------------------------|-------|---|--|---|
| DRAWN                | 2023-11-10 | TITLE<br><br>IX1 10/100BT MAGJACK<br><br>TAB DOWN, SHIELDED | DRAWING NO.                   | UNLESS OTHERWISE NOTED, DIM. TOL. : |       |  |  | <br><b>bel</b> MAGNETIC SOLUTIONS<br><br>a bel group |
| TOWER YU / FRANK LIU |            |   | P01-0002                      | X.                                  | ±0.25 | SIZE : A4   |  |   |
| CHECKED              | 2023-11-10 |   |                               | .X                                  | ±0.25 | UNIT : mm   |  |   |
| BILL LIU             |            |   |                               | .XX                                 | ±0.25 | SCALE : NA  |  |   |
| APPROVED             | 2023-11-10 |   | FILE NAME<br><br>P01-0002.DRW | .XXX                                | ±0.25 | PAGE : 2 / 4  |  | REV. : 1  |
| TONY YUAN            |            |   |                               |                                     |       |   |  |   |



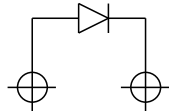
## NOTES:

SUGGESTED PANEL OPENING

THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE THE USER THE ABILITY TO HAVE REASONABLE JACK / PANEL CLEARANCES YET MAINTAIN RELIABLE GROUNDING CAPABILITY.

LED POLARITY DETAIL

(ENLARGED VIEW)

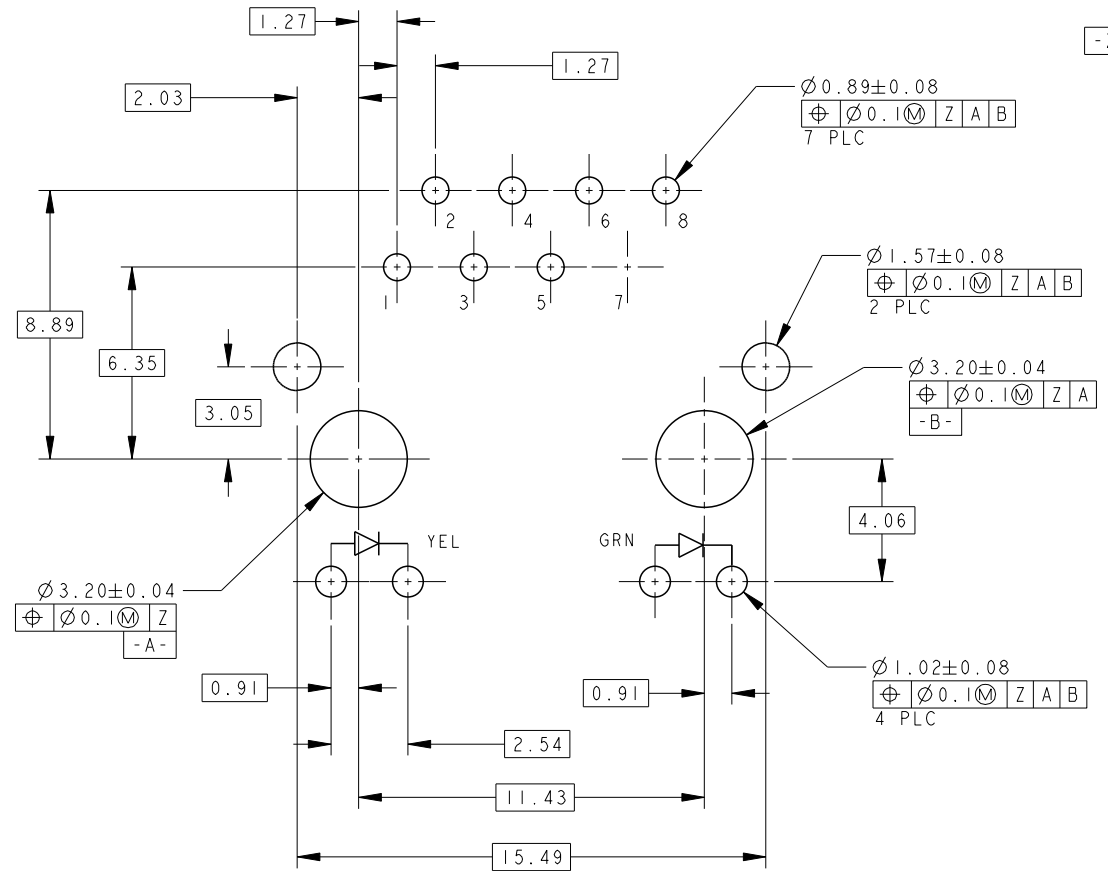


SINGLE COLOR LED

## LED SPECIFICATION

| STANDARD LED | WAVELENGTH | Forward V (MAX) | *(TYP) |
|--------------|------------|-----------------|--------|
| GREEN        | 568 nm     | 2.5 V           | 2.2 V  |
| YELLOW       | 588 nm     | 2.5 V           | 2.1 V  |

\*WITH A FORWARD CURRENT OF 20 mA (TYP)



PCB RECOMMENDED HOLE LAYOUT  
(SEEN FROM COMPONENT SIDE)

-Z-



|                      |            |
|----------------------|------------|
| <b>DRAWN</b>         | 2023-11-10 |
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| <b>APPROVED</b>      | 2023-11-10 |
| TONY YUAN            |            |

**TITLE**

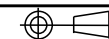
IXI 10/100BT MAGJACK  
TAB DOWN, SHIELDED

**DRAWING NO.****P01-0002****FILE NAME**

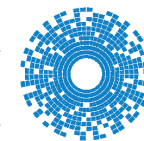
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UNLESS OTHERWISE  
NOTED, DIM. TOL.:

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| X.   | ±0.25 |
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| .XXX | ±0.25 |



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| <b>UNIT:</b>  | mm    |
| <b>SCALE:</b> | NA    |
| <b>PAGE:</b>  | 3 / 4 |
| <b>REV.:</b>  | 1     |



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| CHANGE HISTORY |            |                       |        |          |           |      |
|----------------|------------|-----------------------|--------|----------|-----------|------|
| ISSUE          | DATE       | DESCRIPTION OF CHANGE | REASON | DRAWN    | APPROVAL  | ECN# |
| 1              | 2023-11-10 | INITIAL RELEASE       | -      | TOWER YU | TONY YUAN | -    |
|                |            |                       |        |          |           |      |

|                      |            |
|----------------------|------------|
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