

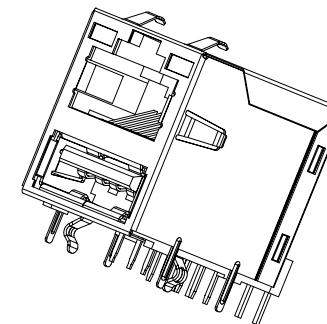
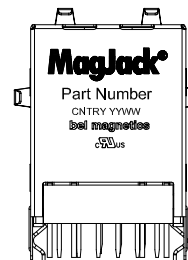
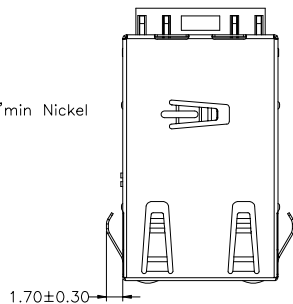
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**NOTES:**

- MECHANICAL:**
1. SHIELD MATERIAL: COPPER ALLOY (OR STEEL ALLOY) 0.20mm THICKNESS PLATING NI.
  2. Grounding leg of USB: Phosphor Bronze, Thickness=0.30mm finish: 100u"min Tin over 50~100u"min Nickel
  3. HOUSING MATERIAL : PBT+30%GF. THERMOPLASTIC UL94V-0;
  4. INSERT MATERIAL : PBT+30%GF. THERMOPLASTIC UL94V-0;
  5. CONTACT MATERIAL : PHOSPHORUS BRONZE t=0.35mm. (C5191H)
  5. PLATING :
    1. MATING AREA- Gold flash, GOLD OVER 30-80u" BRIGHT NICKEL.
    2. SOLDER AREA- 75-300u" TIN OVER 30-80u" NICKEL.
    3. LED PINS AREA- 75-300u" TIN OVER 30-80u" NICKEL.

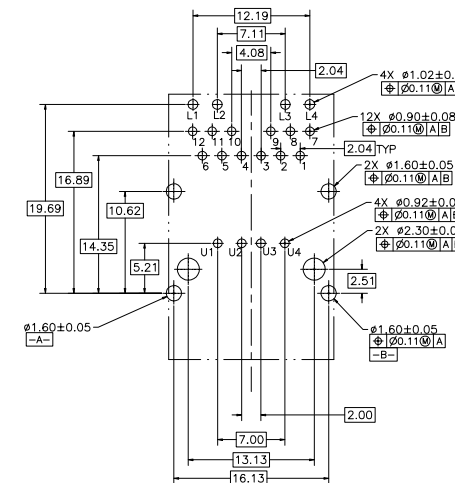
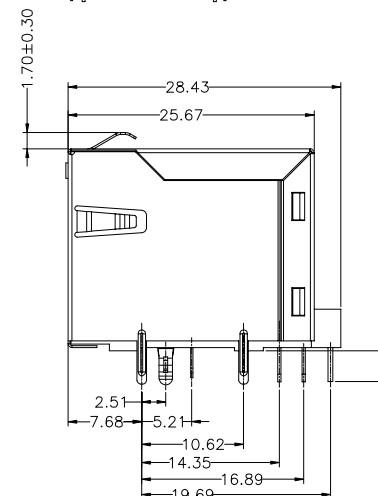
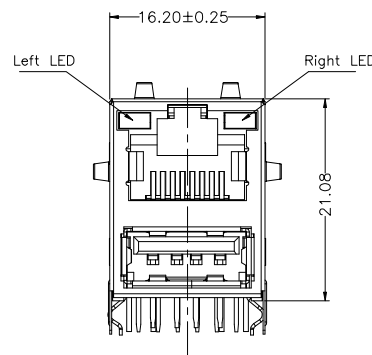


**RJ45 SPECIFICATIONS:**

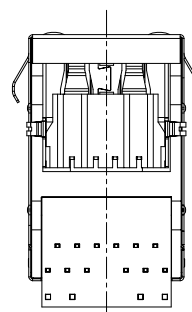
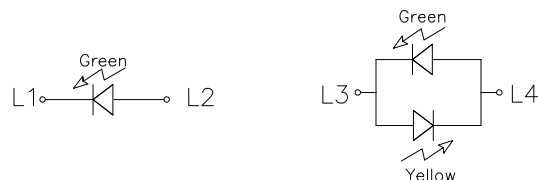
1. ELECTRICAL CHARACTERISTICS:
  - 1-1. DIELECTRIC STRENGTH: 1500VAC RMS 60Hz, 1MIN.
  - 1-2. LED'S CHARACTERISTICS:
    - 1-2-1. FORWARD CURRENT: 30mA MAX.
    - 1-2-2. FORWARD VOLTAGE: 2.2 VOLTS TYPICAL.
    - 1-2-3. PEAR EMISSION WAVELENGTH: GREEN LED 568nm TYP, AT IF=20mA.
    - 1-2-4. ANODE → CATHODE YELLOW LED 589 nm TYP, AT IF=20mA.
    - ORANGE LED 610 nm TYP, AT IF=20mA.
- 1-3. Mates With Modular Plug Conforming To FCC PART 68, Subpart F.
2. MECHANICAL CHARACTERISTICS:
  - 2-1. MATING/UNMATING FORCE: 5 LBS MAXIMUM.
  - 2-2. DURABILITY (MATING/UNMATING CYCLES): 1000 CYCLES.
  - 2-3. OPERATING TEMPERATURE: -40°C TO +85°C.
  - STORAGE TEMPERATURE: -40°C TO +85°C.
  - 2-4. CONNECTOR TO PCB INSERTION FORCE < 8LBS.
  - 2-5. PLUG TO JACK RETENTION: 10LBS MIN.

**USB SPECIFICATIONS:**

1. ELECTRICAL CHARACTERISTICS:
  - 1-1. CONTACT CURRENT RATING: 1 AMPERE.
  - 1-2. CONTACT RESISTANCE : 30 mOHMS MAX.
  - 1-3. DIELECTRIC WITHSTANDING VOLTAGE: 750 VAC RMS 60HZ, 1 MIN.
  - 1-4. INSULATION RESISTANCE: 1000 MOHMS MIN @500 VDC.
2. MECHANICAL CHARACTERISTICS:
  - 2-1. CONTACT MATING FORCE: 34.3N (3.5kg) MAX.
  - 2-2. CONNECTOR UNMATING FORCE : 9.8N (1.0kg) MIN.
  - 2-3. DURABILITY: 1500 CYCLES.
  - 2-4. OPERATING TEMPERATURE: -40°C TO +85°C.



SUGGESTED CUSTOMER BOARD LAYOUT



P01-7CJ0-01  
PART NUMBER

RAWN 24Apr2024 ARR Y E / FRANK LIU HECKED 24Apr2024 ILL LIU PPROVED 24Apr2024 ONY YUAN 02(2)120214	<b>TITLE</b> Gigabit MagJack® (WITH LED) PATENTED	<b>DRAWING NO.</b> P01-7CJ0		UNLESS OTHERWISE NOTED, TOL:			
		<b>FILE NAME</b> P01-7CJ0_1.DWG		X. ±0.38	SIZE: A4		
				.X ±0.38	UNIT: mm		
			.XX ±0.25	SCALE: N/A			
			.XXX ±0.13	PAGE: 1/3	REV.: 1		

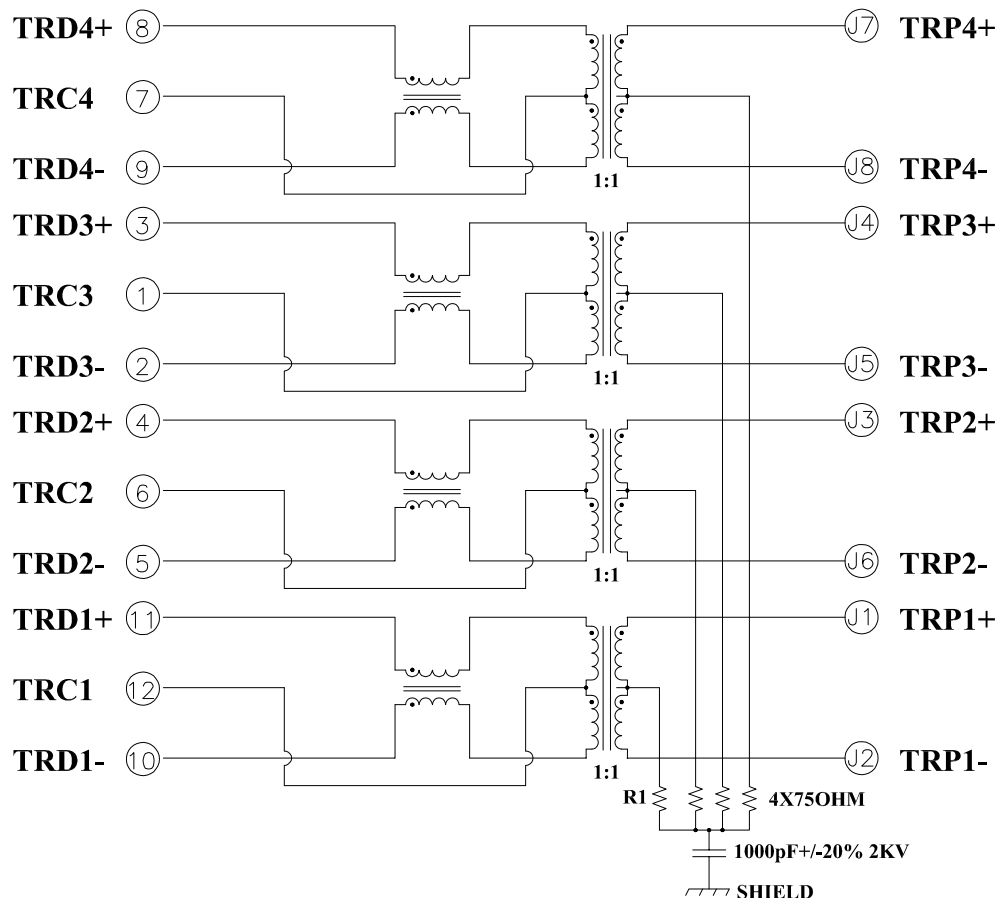


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### Electrical Specification @ 25 C°

unless otherwise noted

**Insertion Loss: 0.5 dB MAX @ 1-60 MHZ**  
**1.0 dB MAX @ 60-100 MHZ**  
**1.2 dB MAX @ 100-125 MHZ**

**Return Loss: 16.0 dB MIN @ 10-30 MHZ**  
**12.0 dB MIN @ 30-60 MHZ**  
**10.0 dB MIN @ 60-80 MHZ**

**Cross Talk: 35 dB MIN @ 1-40 MHZ**  
**33-20LOG(f/50) dB MIN @ 40-100 MHZ**

**CMR: 30 dB MIN @ 1-100 MHZ**

**Hipot: 2250V DC 60S 1mA**

**OCL: 350uH MIN @ 100KHZ 100mV 8mA DC**

RAWN	24Apr2024
ARRY YE / FRANK LIU	
HECKED	24Apr2024
WILL LIU	
APPROVED	24Apr2024
WENYUAN	

<b>TITLE</b>	Gigabit MagJack <sup>®</sup> (WITH LED) PATENTED
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<b>DRAWING NO.</b>	P01-7CJ0
<b>FILE NAME</b>	P01-7CJ0_1.DWG

<b>UNLESS OTHERWISE NOTED, TOL:</b>			
X.	±0.38	SIZE:	A4
.X	±0.38	UNIT:	mm
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.XXX	±0.13	PAGE: 2/3	REV.: 1



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CHANGE HISTORY

ISSUE	DATE	DESCRIPTION OF CHANGE	REASON	DRAWN	APPROVAL	ECN#
1	24APR2024	-	INITIAL RELEASE	JARRY YE	TONY YUAN	-

RAWN 24Apr2024  
JARRY YE / FRANK LIU

CHECKED 24Apr2024  
WILL LIU

APPROVED 24Apr2024  
TONY YUAN

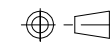
**TITLE**  
Gigabit MagJack<sup>®</sup>  
(WITH LED)  
PATENTED

**DRAWING NO.**  
P01-7CJ0

**FILE NAME**  
P01-7CJ0\_1.DWG

UNLESS OTHERWISE NOTED, TOL:

X.	±0.38
.X	±0.38
.XX	±0.25
.XXX	±0.13



<b>SIZE:</b>	A4
<b>UNIT:</b>	mm
<b>SCALE:</b>	N/A
<b>PAGE:</b> 3/3	<b>REV.:</b> 1



**bel** MAGNETIC SOLUTIONS  
a bel group