

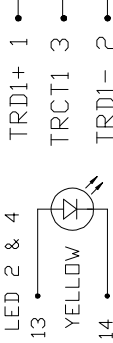
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**ELECTRICAL CHARACTERISTICS @ 25°C**

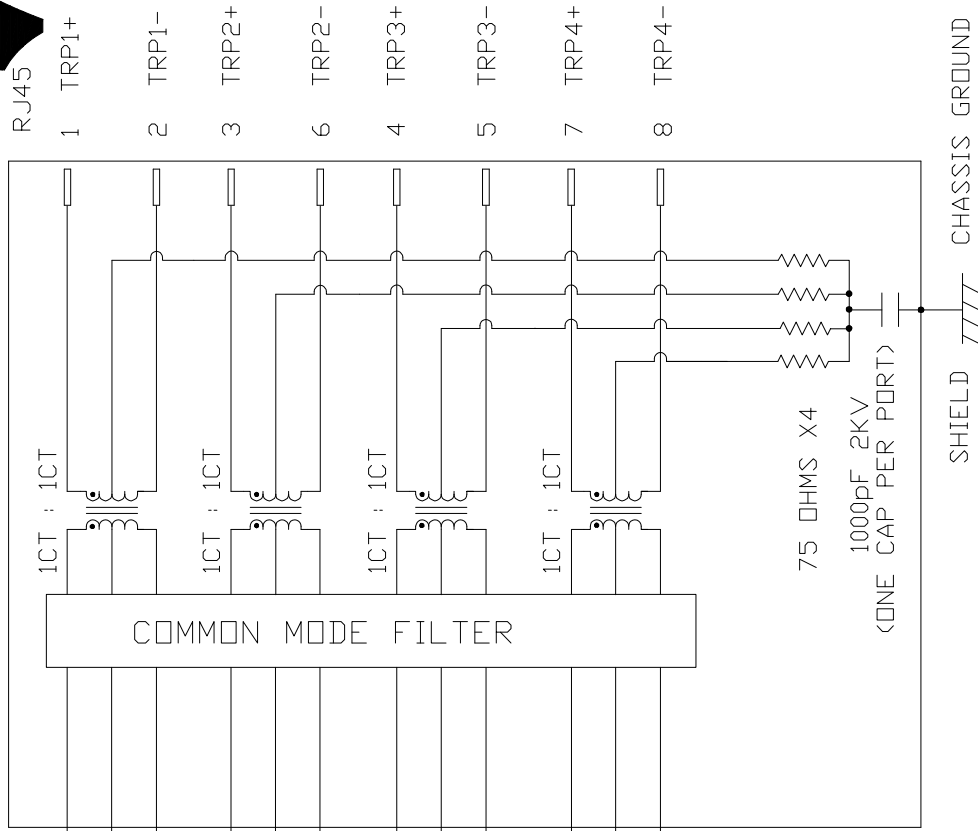
**URNS RATIO**  
 TP1 1CT : 1CT  
 TP2 1CT : 1CT  
 TP3 1CT : 1CT  
 TP4 1CT : 1CT  
  
**INS. LOSS (MAX)**  
 1MHz TO 20MHz -0.8 dB  
 50MHz -1.0 dB  
 200MHz -1.2 dB  
 400MHz -2.0 dB  
 500MHz -3.0 dB  
  
**RET. LOSS (MIN) \_FORM TESTING**  
 1MHz -20 dB  
 2MHz -20 dB  
 100MHz -20 dB  
 200MHz -17 dB  
 300MHz -13 dB  
 400MHz -10 dB  
 500MHz -6 dB  
  
**CM TO DM REJ**  
 1MHz - 500MHz -30 dB MIN  
  
**HIPOT (Isolation Voltage): 2250VDC**  
 100% OF PRODUCTION TESTED TO COMPLY WITH IEEE 802.3 ISOLATION REQUIREMENTS.  
  
**LED 1 & 3**  
 VF (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP.  
 ORANGE 2.0V TYP.  
 AD (DOMINANT WAVELENGTH) IF=20mA GREEN 570nm TYP.  
 ORANGE 605nm TYP.  
  
**LED 2 & 4**  
 VF (FORWARD VOLTAGE) IF=20mA YELLOW 2.1V TYP.  
 AD (DOMINANT WAVELENGTH) IF=20mA YELLOW 590nm TYP.  
 OPERATING TEMPERATURE: -40°C TO +85°C.

LED 2 & 4 POLARITY		LED 1 & 3 POLARITY	
PIN 13	PIN 14	PIN 15	PIN 16
+	-	+	-
YELLOW	YELLOW	+	-
		+	DRANGE

**PIN**



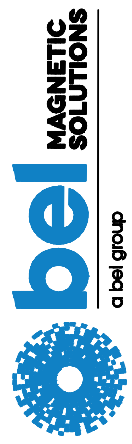
**SCHEMATIC**



RJ45

- 1 TRP1+
- 2 TRP1-
- 3 TRP2+
- 6 TRP2-
- 4 TRP3+
- 5 TRP3-
- 7 TRP4+
- 8 TRP4-

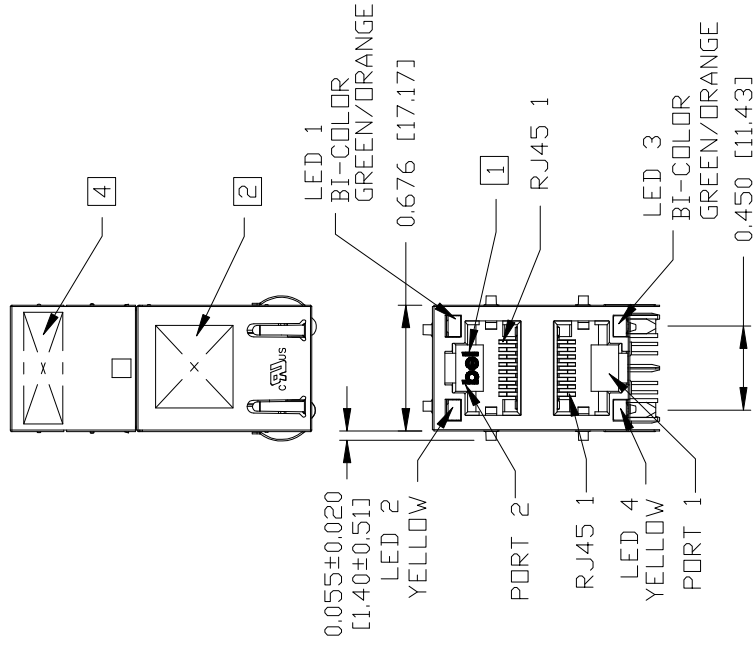
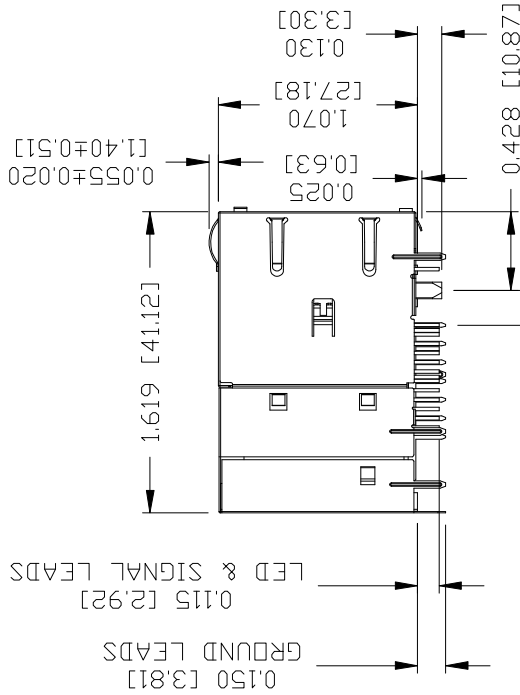
<b>ORIGINATED BY</b> CHOW WANCHUNG	<b>PART NO. / DRAWING NO.</b> G23-21YR-112-L	<b>STANDARD DIM.</b> TOL. IN INCH	[ ] METRIC DIM. AS REF.
<b>DATE</b> 2023-08-07	<b>FILE NAME</b> G23-21YR-112-L_1.DWG	.X	UNIT : INCH [mm]
<b>DRAWN BY</b> YI LIU	<b>PATENTED</b>	.XX	SCALE : N/A
<b>DATE</b> 2023-08-07		.XXX	SIZE : A4
		REV. : 1	PAGE : 2



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**NOTES:**

1. PLASTIC HOUSING: THERMOPLASTIC PBT, BLACK.

2. FLAMMABILITY RATING UL 94V-0

3. CONTACT PLATING: 50 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT

4. OUTPUT PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.

5. 100 MICRO-INCH MIN MATTE TIN. PINS ARE SOLDER DIPPED.

6. METAL SHIELD: NICKEL PLATED ON COPPER ALLOY.

7. (ALL GROUND LEADS ARE SOLDER DIPPED)

8. [1] JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS,

9. PART 68 SUBPART F.

10. [2] MARK PART WITH MFG LOGO, NAME, PART NUMBER AND DATE CODE.

3. THE PRODUCT IS RoHS COMPLIANT

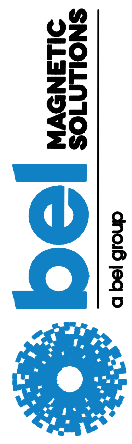
4. c UsUL RECOGNIZED - FILE #E169987.

5. [4] THE PRODUCT IS PATENTED. "PATENTED" MARKING IS ON THE TOP SURFACE. THE PATENT NUMBER ARE U.S. PAT. 7,429,195 & U.S. PAT. 6,840,817 & U.S. PAT. 7,123,117 AND U.S. PAT. 7,924,130.

6. 5. THE AXIAL RETENTION FORCE OF RJ PORT IS 15LBS MIN.

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

ORIGINATED BY TONY YUAN	PART NO. / DRAWING NO. G23-21YR-112-L	STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REF.
DATE 2023-08-07	FILE NAME G23-21YR-112-L-1.DWG	.X	UNIT : INCH [mm]
DRAWN BY JARRY YE	TITLE 2X1 10 Gigabit MagJack® PATENTED	.XX	SCALE : N/A
DATE 2023-08-07		.XXX	±0.010
			SIZE : A4

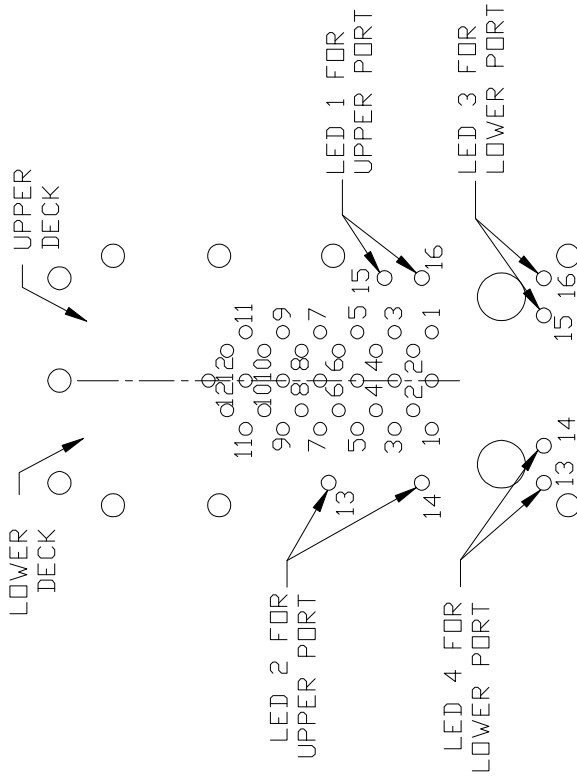


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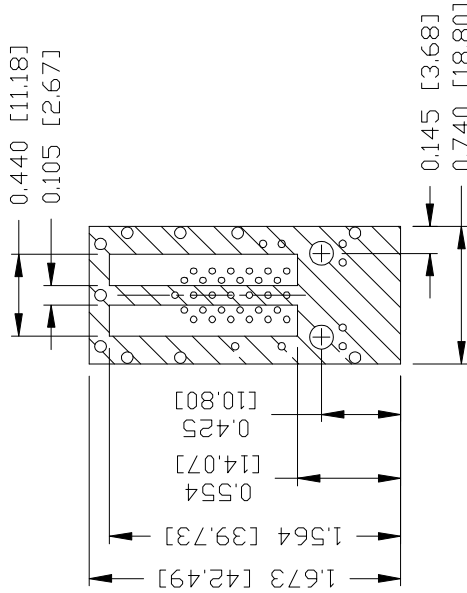
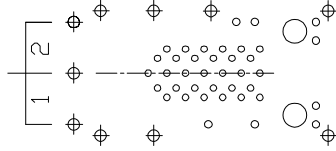


PORT ASSIGNMENT  
(COMPONENT SIDE VIEW)



PIN-OUT INFORMATION  
(COMPONENT SIDE VIEW)

10	TRD4+
9	TRCT3
8	TRD3-
7	TRD3+
6	TRCT2
5	TRD2-
4	TRD2+
3	TRCT1
2	TRD1-
1	TRD1+
16	ORANGE(+)/GREEN(-)
15	ORANGE(-)/GREEN(+)
14	YELLOW (-)
13	YELLOW (+)
12	TRCT4
11	TRD4-

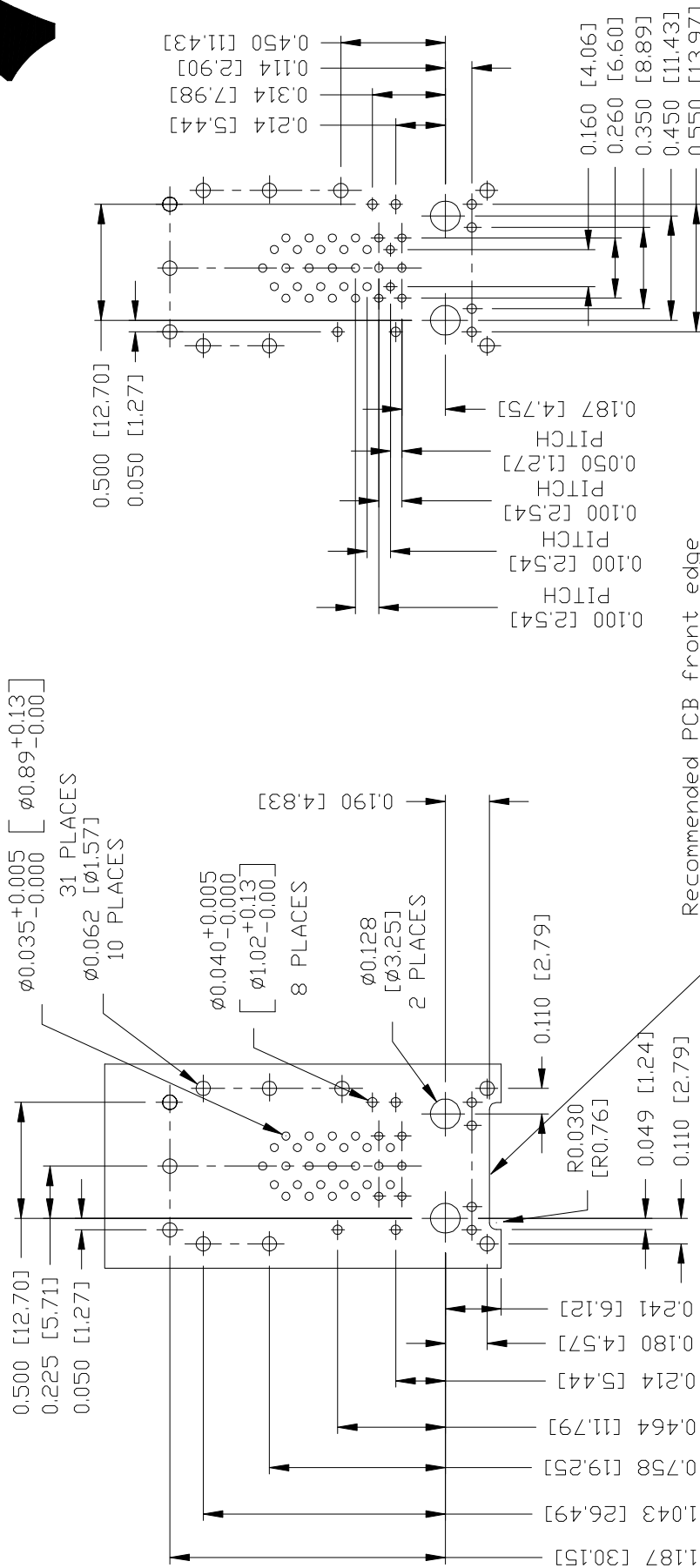


THE SHADED AREA ON THE CUSTOMER BOARD ARE RECOMMENDED TO BE CLEAR OFF ANY VIA HOLE OR COMPONENT PAD.

REV. : 1	PAGE : 4
 <b>MAGNETIC SOLUTIONS</b> a bel group	
STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REF.
.X	UNIT : INCH [mm]
.XX	SCALE : N/A
.XXX	±0.004
SIZE : A4	
PART NO. / DRAWING NO.	G23-21YR-112-L
FILE NAME	G23-21YR-112-L_1.DWG
TITLE	
ORIGINATED BY	2X1 10 Gigabit MagJack®
DATE	PATENTED
DRAWN BY	
DATE	

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Recommended PCB front edge cutout. The bottom shield ground tabs (front) should not be seated on the top of the PCB.

SUGGESTED FOOTPRINT  
(COMPONENT SIDE VIEW)

REV. : 1		PAGE : 5	
<b>STANDARD DIM.</b> [ ] METRIC DIM. AS REF.		 <b>bel group</b>	
<b>PART NO. / DRAWING NO.</b> G23-21YR-112-L		<b>UNIT : INCH [mm]</b> SCALE : N/A	
<b>FILE NAME</b> G23-21YR-112-L_1.DWG		<b>SIZE : A4</b>	
<b>TITLE</b> 2X1 10 Gigabit MagJack® PATENTED		<b>ORIGINATED BY</b> TONY YUAN <b>DATE</b> 2023-08-07 <b>DRAWN BY</b> JARRY YE <b>DATE</b> 2023-08-07	

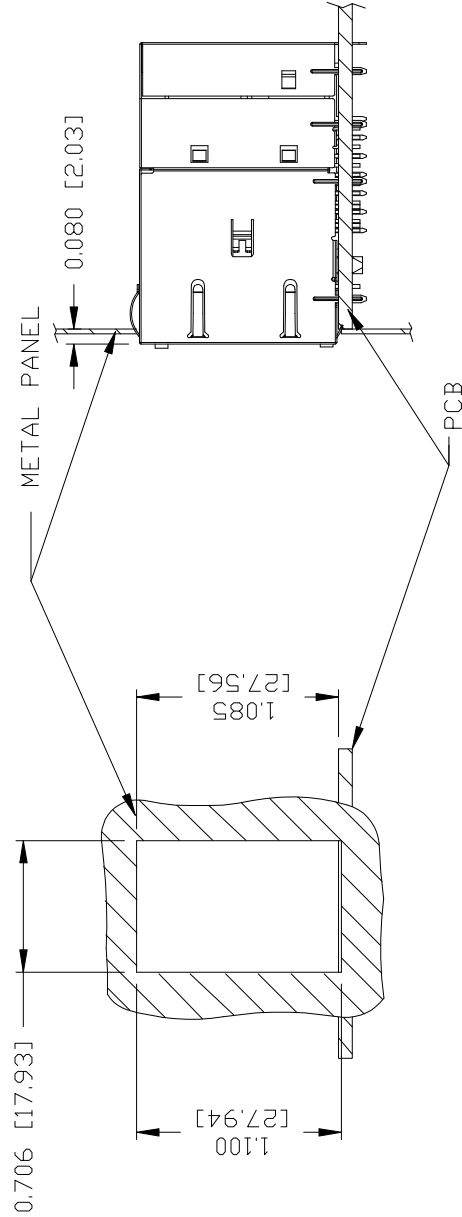
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SUGGESTED PANEL OPENING



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 : 0200M9999-P3 (TOP)  
0200M9999-P2 (BOTTOM)

PACKING QUANTITY : 18 PCS FINISHED GOODS PER TRAY.

9 TRAYS (162 PCS FINISHED GOODS) PER CARTON BOX.

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

REV. : 1		PAGE : 6	
<b>ORIGINATED BY</b> TONY YUAN <b>DATE</b> 2023-08-07 <b>DRAWN BY</b> JARRY YE <b>DATE</b> 2023-08-07		<b>TITLE</b> 2X1 10 Gigabit MagJack® PATENTED	
<b>PART NO. / DRAWING NO.</b> G23-21YR-112-L <b>FILE NAME</b> G23-21YR-112-L_1.DWG		<b>STANDARD DIM. TOL. IN INCH</b> .X .XX .XXX ±0.005	
<b>[ ] METRIC DIM. AS REF.</b> UNIT : INCH [mm] SCALE : N/A SIZE : A4		 a bel group	

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