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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
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HIPOT (Isolation Voltage): 2250VDC

100% OF PRODUCTION TESTED TO COMPLY WITH

IEEE 802.3 ISOLATION REQUIREMENTS.

LED 1 & 3

V _F (FORWARD VOLTAGE)	IF=20mA	GREEN	2.2V TYP.
		ORANGE	2.0V TYP.
λ _D (DOMINANT WAVELENGTH)	IF=20mA	GREEN	570nm TYP.
		ORANGE	605nm TYP.

LED 2 & 4

V _F (FORWARD VOLTAGE)	IF=20mA	YELLOW	2.1V TYP.
λ _D (DOMINANT WAVELENGTH)	IF=20mA	YELLOW	590nm TYP.

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

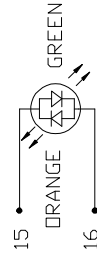
LED 2 & 4 POLARITY		LED 1 & 3 POLARITY	
PIN 13	PIN 14	PIN 15	PIN 16
+	-	+	-
-	+	-	+
YELLOW		GREEN	
ORANGE		ORANGE	

PIN

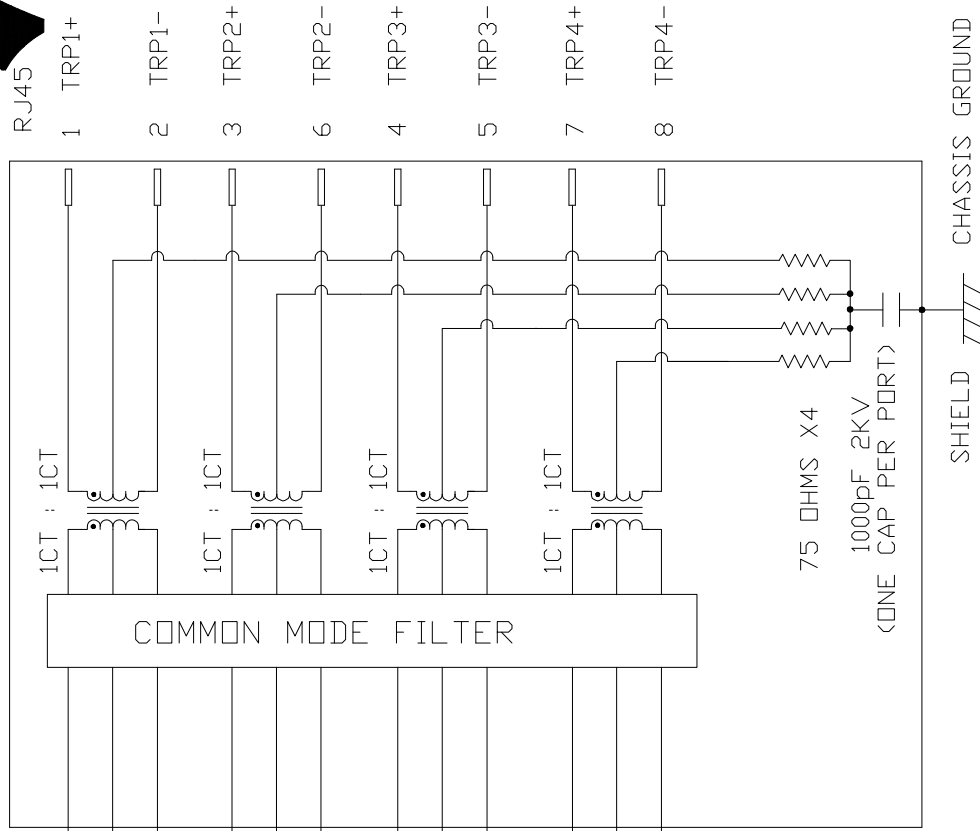
LED 2 & 4	TRD1+ 1
13	TRCT1 3
14	TRD1- 2

TRD2+ 4	TRD2- 5
TRCT2 6	TRD3+ 7
TRD3- 8	TRCT3 9
TRD4+ 10	TRCT4 12
TRD4- 11	

LED 1 & 3



SCHEMATIC



RoHS

RJ45

ORIGINATED BY

CHOW WANCHUNG

DATE 2023-08-07

DRAWN BY

YI LIU

DATE 2023-08-07

TITLE

2X1 10 Gigabit MagJack®

PATENTED

PART NO. / DRAWING NO.

G23-21YR-112-L

FILE NAME

G23-21YR-112-L_1.DWG

STANDARD DIM. TOL. IN INCH

.X

.XX

.XXX

[] METRIC DIM. AS REF.

UNIT : INCH [mm]

SCALE : N/A

SIZE : A4

REV. :

1

PAGE : 2



MAGNETIC SOLUTIONS

a bel group



3. THE PRODUCT IS RoHS COMPLIANT

RI[®] USUL RECOGNIZED - FILE #E169987.

4. THE PRODUCT IS PATENTED, "PATENTED" MARKING IS ON THE

OF SUKACE; THE FRIEND NUMBER HKE U.S. PAT. 6,840,817 & U.S. PAT. 7,123,117

AND U.S. PAT. 7,924,130.

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

6. THE PART IS RECOMMENDED FOR WAVE SOLDERING. THE

AND 10 SECONDS MAX.

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

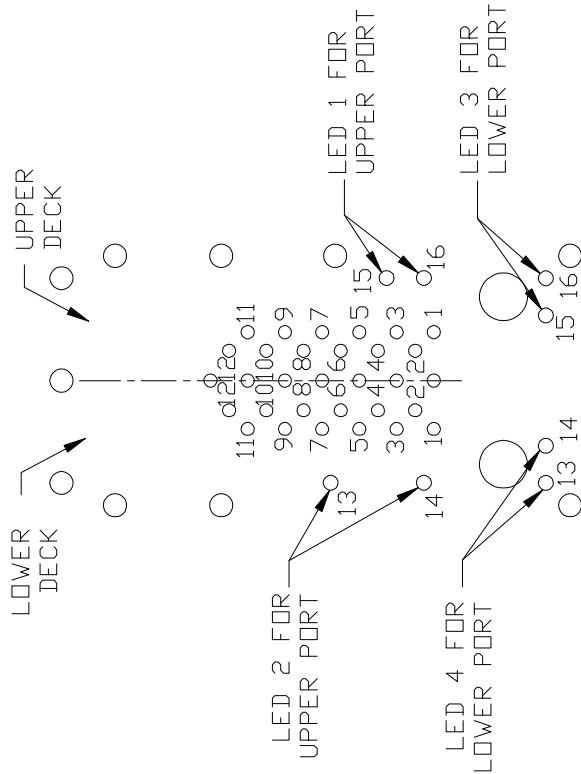
ORIGINATED BY TONY YUAN DATE 2023-08-07		TITLE 2X1 10 Gigabit MagJack® PATENTED	PART NO. / DRAWING NO. G23-21YR-112-L		STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REF.	
DRAWN BY JARRY YE DATE 2023-08-07			FILE NAME G23-21YR-112-L_1.DWG		.X .XX .XXX		UNIT : INCH [mm] SCALE : N/A	
					±0.010 .XXX		SIZE : A4	

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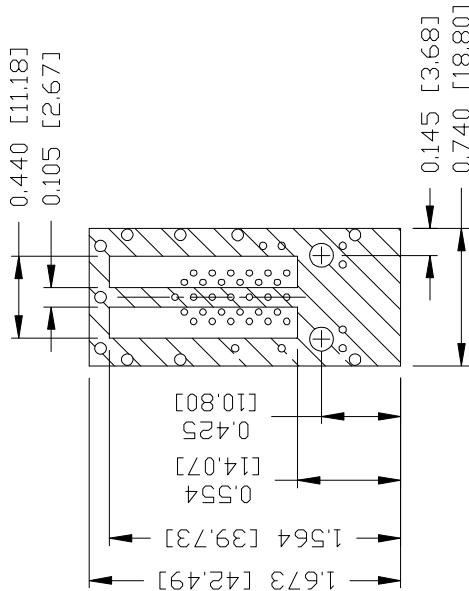


PORT ASSIGNMENT
(COMPONENT SIDE VIEW2)



PIN-OUT INFORMATION
(COMPONENT SIDE VIEW2)

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

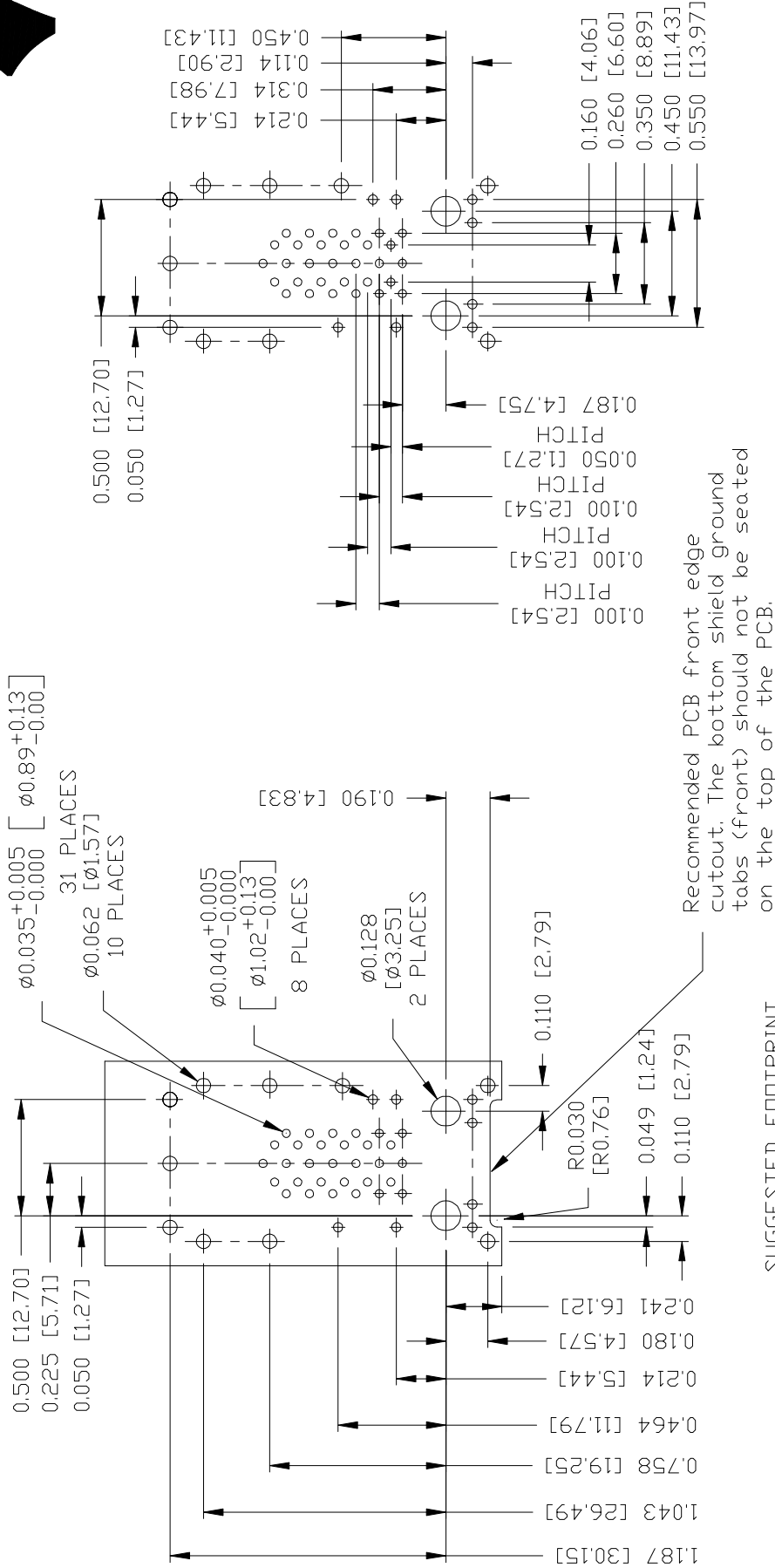


THE SHADED AREA ON THE CUSTOMER BOARD ARE
RECOMMENDED TO BE CLEAR OFF ANY VIA HOLE OR
COMPONENT PAD.

REV. : 1		PAGE : 4	
 bel MAGNETIC SOLUTIONS a bel group		[] METRIC DIM. AS REF.	
		UNIT : INCH [mm]	
		SCALE : N/A	
		SIZE : A4	
STANDARD DIM. TOL. IN INCH			
.X			
.XX			
.XXX		±0.004	
PART NO. / DRAWING NO. G23-21YR-112-L			
FILE NAME G23-21YR-112-L_1.DWG			
TITLE 2X1 10 Gigabit MagJack®		PATENTED	
ORIGINATED BY TONY YUAN		DATE 2023-08-07	
DRAWN BY JARRY YE		DATE 2023-08-07	

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SUGGESTED FOOTPRINT
(COMPONENT SIDE VIEW)

REV. :	1	PAGE :	5
ORIGINATED BY	TONY YUAN	TITLE	2X1 10 Gigabit MagJack®
DATE	2023-08-07		
DRAWN BY	JARRY YE		
DATE	2023-08-07		
PART NO. / DRAWING NO.	G23-21YR-112-L	STANDARD DIM.	[] METRIC DIM.
FILE NAME	G23-21YR-112-L_1.DWG	TOL. IN INCH	AS REF.
		.X	UNIT : INCH [mm]
		.XX	SCALE : N/A
		.XXX	±0.004
			SIZE : A4



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DC002(2)120214



Technical drawing of a PCB assembly showing a top view and a side view.

Top View Dimensions:

- Overall width: 1.100 [27.94]
- Overall height: 1.085 [27.56]
- Mounting area width: 0.706 [17.93]
- Mounting area height: 0.080 [2.03]

Side View Dimensions:

- Mounting area height: 0.080 [2.03]

Labels:

- METAL PANEL
- PCB

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 TRAY : 0200M9999-P3 (TOP)

PACKING QUANTITY : 18 PCS FINISHED GOODS PER TRAY.

REMARK : CARDBOARDS ARE PLACED BETWEEN LAYERS OF PACKING TRAY INSIDE CARTON BOX.

(INCLUDE THE UPPERMOST AND LOWERMOST TRAYS)

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

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