

THE INFORMATION CONTAINED HEREIN IS CONSIDERED 'PROPRIETARY' TO BEL FUSE INC. AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF BEL FUSE INC.

PRELIMINARY



LED1 POLARITY			LED2 POLARITY			
PIN 13	PIN 14	COLOR	PIN 15	PIN 16	PIN 17	COLOR
-	+	YELLOW	-	+	/	ORANGE
/	/	/	/	+	-	GREEN

ELECTRICAL CHARACTERISTICS @ 25°C

URNS RATIO

TP1	1CT : 1CT ±2%
TP2	1CT : 1CT ±2%
TP3	1CT : 1CT ±2%
TP4	1CT : 1CT ±2%

DCL @ 100kHz/100mVRMS

8mA DC BIAS (-40°C - 85°C) 160µH MIN.

INS. LOSS

1MHz TO 150MHz -0.004<fMHz>-0.4 dB MAX

RET. LOSS

1MHz-40MHz -20 dB MIN  
40.1MHz-150MHz -20+15LOG<f/40MHz> dB MIN

CROSS TALK

1MHz - 40MHz -35 dB MIN  
40.1MHz-150MHz -35+15LOG<f/40MHz> dB MIN

CM TO CM REJ

1MHz - 150MHz -25 dB MIN

HIPOT (Isolation Voltage): 1500 VRMS

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

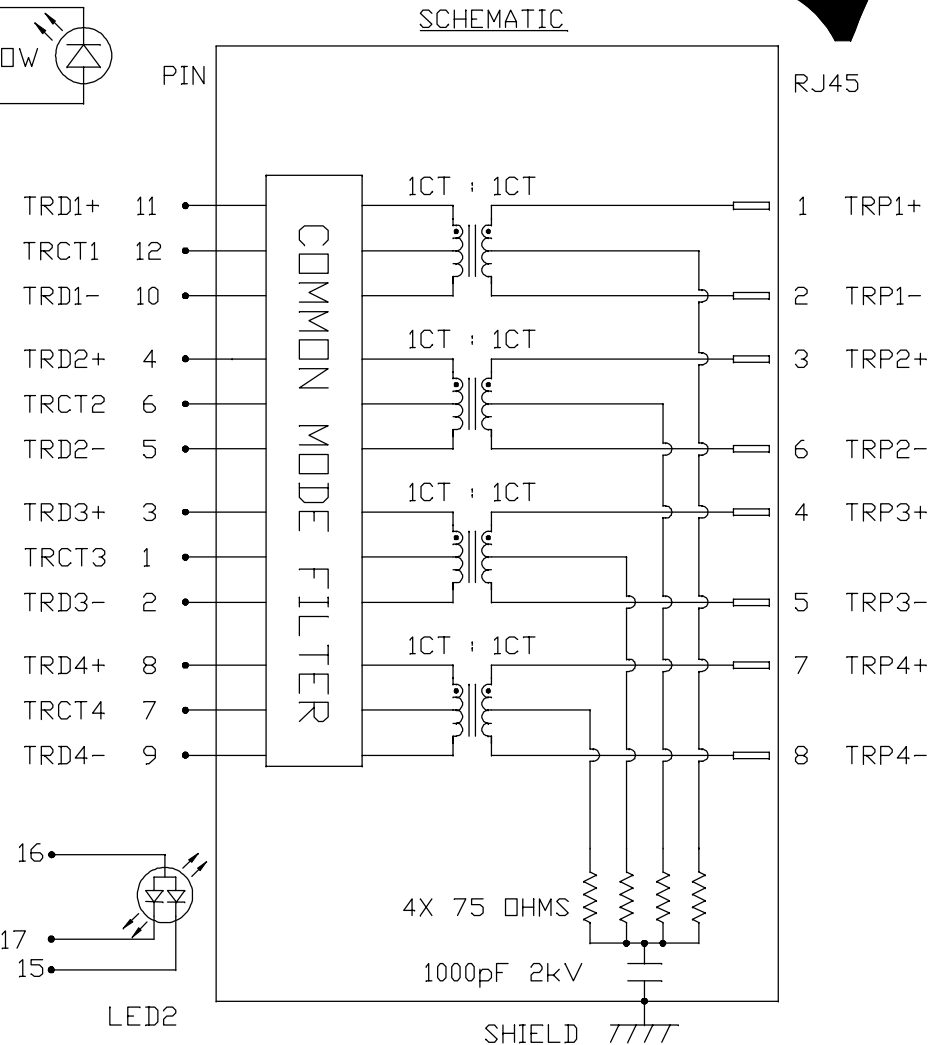
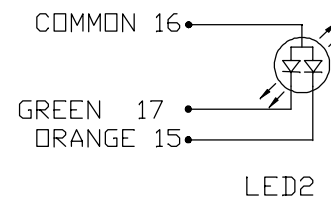
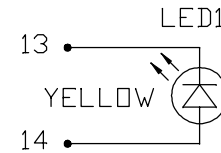
LED 1 (HI-TEMP)

VF (FORWARD VOLTAGE) IF=20mA YELLOW 2.1V TYP.  
λD (DOMINANT WAVELENGTH) IF=20mA YELLOW 590nm TYP.

LED 2 (HI-TEMP)

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

OPERATING TEMPERATURE: -40°C TO 85°C



ORIGINATED BY CHOW WANCHUNG	TITLE 2.5 gigabit MagJack® (Ultra Low Profile) PATENTED
DATE 2022-12-15	
DRAWN BY TANG YUAN	PART NO. / DRAWING NO. L830-1J1D-JM
DATE 2022-12-15	

FILE NAME L830-1J1D-JM_2.DWG	STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REF.
	.X	UNIT : INCH [mm]
	.XX	SCALE : N/A
	.XXX	SIZE : A4

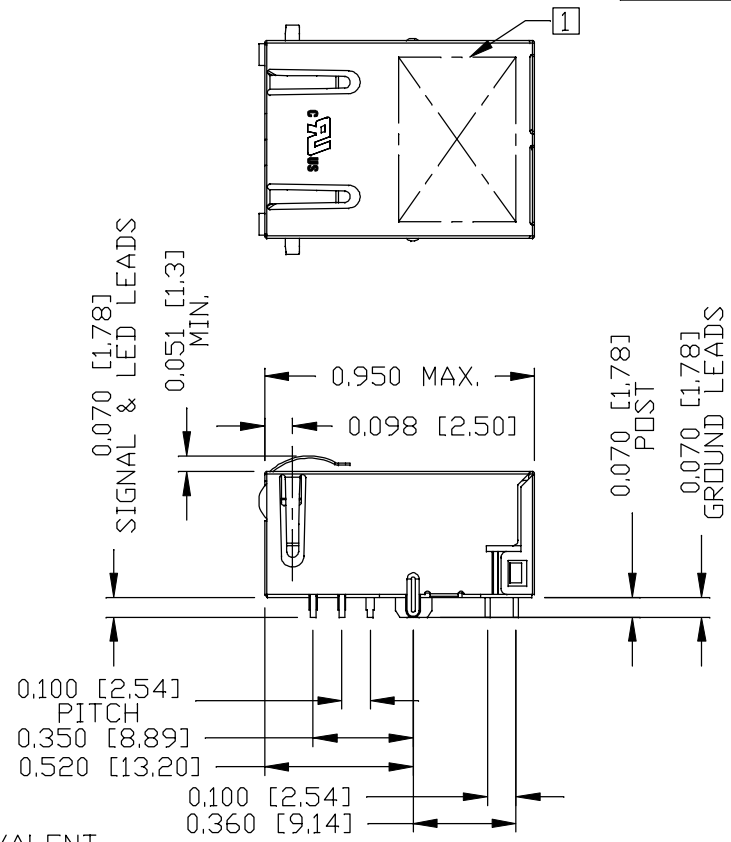
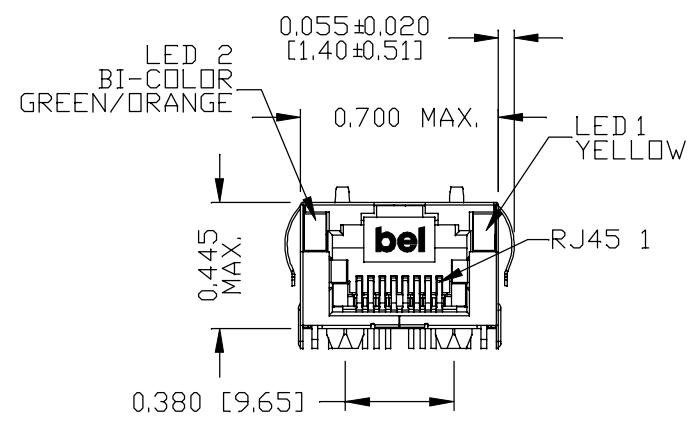
REV. :	2	PAGE :	2
--------	---	--------	---



THE INFORMATION CONTAINED HEREIN IS CONSIDERED "PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF BEL FUSE INC.

MECHANICAL SPECIFICATION

PRELIMINARY



NOTES:

- PLASTIC HOUSING: THERMOPLASTIC PA, BLACK  
FLAMMABILITY RATING UL 94V-0
- CONTACTS: 30 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT.
- OUTPUT PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.  
100 MICRO-INCH MIN MATTE TIN.  
PINS ARE SOLDER DIPPED.
- METAL SHIELD: NICKEL PLATED ON COPPER ALLOY.  
(ALL GROUND LEADS ARE SOLDER DIPPED)

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

- 1. 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.
- 4. THE PRODUCT IS PATENTED. THE PATENT NUMBER ARE U.S. PAT. 6,840,817 AND U.S. PAT. 7,123,117.
- 5. THE PART IS RECOMMENDED FOR WAVE SOLDERING. THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS 260°C MAX AND 10 SECONDS MAX.

ORIGINATED BY LI QUANKUN
DATE 2022-12-15
DRAWN BY OLIVER ZHANG
DATE 2022-12-15

TITLE 2.5 gigabit MagJack <sup>®</sup> (Ultra Low Profile) PATENTED
--

PART NO. / DRAWING NO. L830-1J1D-JM
FILE NAME L830-1J1D-JM_2.DWG

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

REV. : 2	PAGE : 3
----------	----------

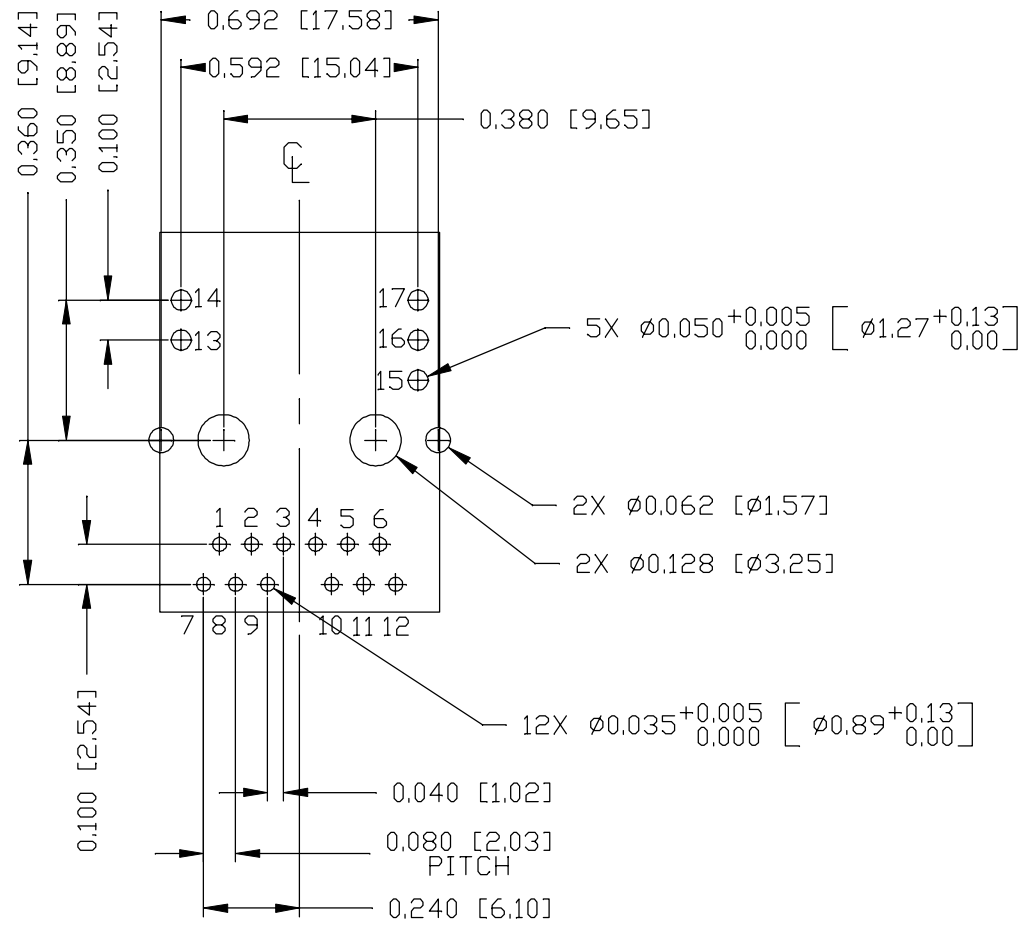


THE INFORMATION CONTAINED HEREIN IS CONSIDERED 'PROPRIETARY' TO BEL FUSE INC. AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF BEL FUSE INC.

PRELIMINARY



RECOMMENDED PCB FOOTPRINT  
COMPONENT SIDE VIEW



ORIGINATED BY  
LI QUANKUN  
DATE 2022-12-15  
DRAWN BY  
OLIVER ZHANG  
DATE 2022-12-15

TITLE  
2.5 gigabit MagJack®  
(Ultra Low Profile)  
PATENTED

PART NO. / DRAWING NO.  
L830-1J1D-JM  
FILE NAME  
L830-1J1D-JM\_2.DWG

STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REF.
.X	UNIT : INCH [mm]
.XX	SCALE : N/A
.XXX	SIZE : A4
±0.004	

REV. : 2 PAGE : 4

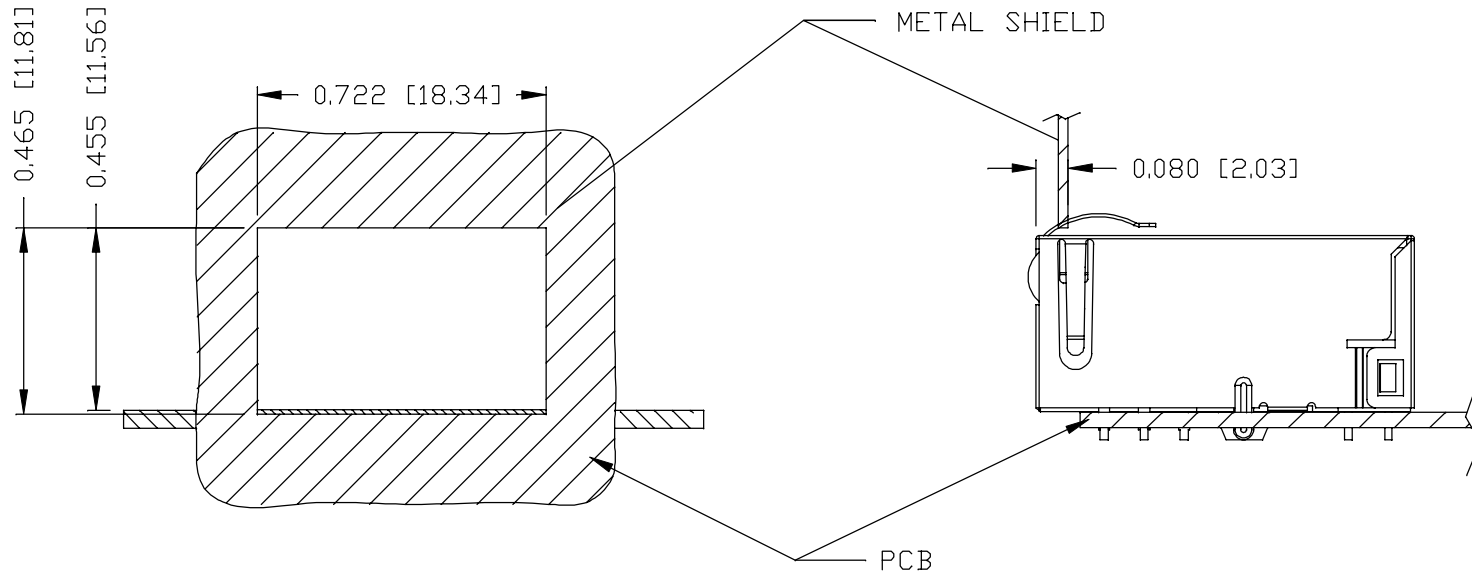


THE INFORMATION CONTAINED HEREIN IS CONSIDERED "PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF BEL FUSE INC.

PRELIMINARY



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.

TRAY PACKING INFORMATION



PACKING TRAY : 0200-9999-E4 (TOP)

0200-9999-E5 (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)

REV. :	2	PAGE :	5
 <b>bel</b> MAGNETIC SOLUTIONS a bel group		[ ] METRIC DIM. AS REF.	
		UNIT : INCH [mm]	
		SCALE : N/A	
ORIGINATED BY LI QUANKUN DATE 2022-12-15		STANDARD DIM. TOL. IN INCH	
DRAWN BY OLIVER ZHANG DATE 2022-12-15		.X	
TITLE 2.5 gigabit MagJack® (Ultra Low Profile) PATENTED		.XX	
PART NO. / DRAWING NO. L830-1J1D-JM		.XXX ±0.005	
FILE NAME L830-1J1D-JM_2.DWG		 SIZE : A4	