THE INFORMATION CONTAINED HEREIN IS CONSIDERED LED 2 & 4 POLARITY LED 1 & 3 POLARITY **RoHS** "PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE PIN 13 PIN 14 | COLOR | PIN 15 | PIN 16 | COLOR COPIED, REPRODUCED OR DISCLOSED WITHOUT THE PRFI IMINARY WRITTEN APPROVAL OF BEL FUSE INC. YELLOW GREEN + DRANGE SCHEMATIC **RJ45** PIN ELECTRICAL CHARACTERISTICS @ 25°C LED 2 & 4 1CT : 1CT 13 ← 1 TRP1+ TURNS RATIO TRD1+ 1 ← 1CT : 1CT TP1 YFI I ПW TP2 TRCT1 3 ← 1CT : 1CT 14 • TP3 1CT : 1CT TRD1- 2 ← ----|2 TRP1-TP4 1CT : 1CT INS. LOSS (MAX) 10T : 10T 1MHz TO 20MHz -0.8 dB ----|3 TRP2+ TRD2+ 4 ← 50MHz -1.0 dBTRCT2 6 ← 200MHz -1.2 dB 400MHz -2.0 dBTRD2- 5 ← ----|6 TRP2- \leq 500MHz -3.0 dB1CT : 1CT RET. LOSS (MIN) @ 100 OHMS \square -**□**|4 TRP3+ TRD3+ 7 • $1MHz \leqslant f \leqslant 40MHz$ 16 dB MIN TRCT3 9 ← 40MHz < f <400MHz $16-10L\Box G(f/40MHz) dB$ -—|5 TRP3-TRD3- 8 ← 400MHz < f <500MHz $6-30L\Box G(f/400MHz) dB$ CM TO CM REJ 1CT : 1CT 1MHz - 500MHz ___|7 TRP4+ -25 dB MIN TRD4+ 10 • TRCT4 12 ← CM TO DM REJ π TRD4- 11 •-8 TRP4-1MHz - 500MHz -30 dB MIN LED 1 & 3 HIPOT (Isolation Voltage): 2250VDC 100% OF PRODUCTION TESTED TO COMPLY WITH DRANGE (長) GREEN IEEE 802.3 ISOLATION REQUIREMENTS. LED 2 & 4 VF (FORWARD VOLTAGE) 75 □HMS X 4 \ IF=20mA YELLOW 2.1V TYP. AD (DOMINANT WAVELENGTH) IF=20mA YELLOW 590nm TYP. LED 1 & 3 VF (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP. 1000pF 2KV DRANGE 2.0V TYP. (ONE CAP PER PORT) AD (DOMINANT WAVELENGTH) IF=20mA GREEN 570nm TYP TRANGE 605nm TYP. SHIELD CHASSIS GROUND DPERATING TEMPERATURE: 0°C TD +70°C. PAGE: 2 REV. : PΑ ORIGINATED BY TITLE PART NO. / DRAWING NO. STANDARD DIM [] METRIC DIM. CHOW WANCHUNG TOL. IN INCH AS REF. G23-21YR-010 DATE 2018-10-19 2X1 10 Gigabit MagJack® UNIT : INCH [mm] DRAWN BY FILE NAME PATENTED SCALE : N/A XIE YIMING .XX G23-21YR-010 PA.DWG a bel group

DATE

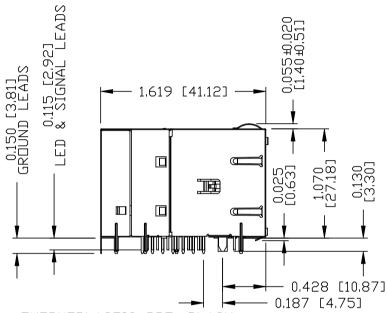
2018-10-19

SIZE : A4

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





PLASTIC HOUSING: THERMOPLASTIC PBT, BLACK.

FLAMMABILITY RATING UL 94V-0

CONTACT PLATING: 50 MICRO-INCH HARD GOLD PLATING

OR EQUIVALENT

DUTPUT PINS: TIN-CDATED 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. JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS,

PART 68 SUBPART F.

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

3. THE PRODUCT IS ROHS COMPLIANT.

• Tile #E169987.

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

4

2

LED 1

1

LED 3

BI-COLOR

0.450 [11.43]

GREEN/ORANGE

BI-CII IIR

0.676 [17.17]

RJ45 1

GREEN/DRANGE

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

ORIGINATED BY SANDY LIN DATE 2018-10-19	TITLE 2X1 10 Gigabit MagJack®	PART NO. / DRAWING NO. G23-21YR-010	I	ARD DIM. IN INCH	[] METRIC DIM. AS REF.				
DATE 2018-10-19 DRAWN BY	PATENTED	FILE NAME	.x		UNIT : INCH [mm]				
DLIVER ZHANG			.XX		SCALE : N/A				
DATE 2018-10-19		G23-21YR-010_PA.DWG	.xxx	±0.010	SIZE : A4				



NOTES:

0.055±0.020 [1.40±0.51]

LED 2

PORT 2

RJ45 1 LED 4

YELLOW

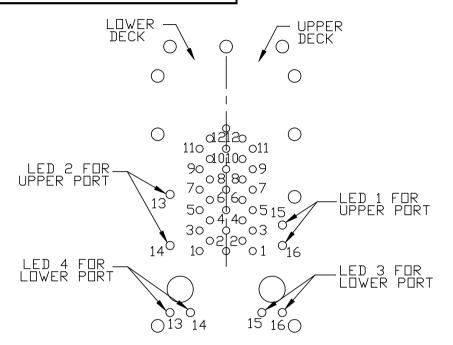
PORT

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

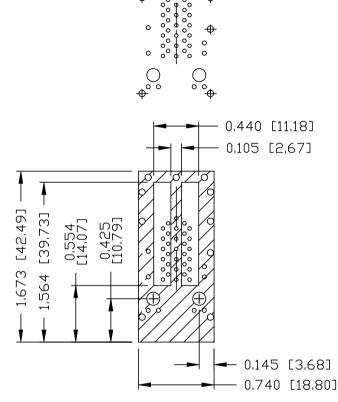
PORT ASSIGNMENT (COMPONENT SIDE VIEW)





PIN-DUT INFORMATION (COMPONENT SIDE VIEW)

		_	
10	TRD4+		
9	TRCT3		
8	TRD3-		
7	TRD3+		
6	TRCT2	16	<pre>DRANGE(+)/GREEN(-)</pre>
5	TRD2-	15	<pre>DRANGE(-)/GREEN(+)</pre>
4	TRD2+	14	YELLOW (-)
3	TRCT1	13	YELLOW (+)
2	TRD1-	12	TRCT4
1	TRN1+	11	TRD4-



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

COMPONENT PAD.

REV. : PAGE: ORIGINATED BY TITLE PART NO. / DRAWING NO. STANDARD DIM. [] METRIC DIM. SANDY LIN TOL. IN INCH AS REF. 2X1 10 Gigabit MagJack® G23-21YR-010 **DATE** 2018-10-19 UNIT : INCH [mm] PATENTED DRAWN BY FILE NAME OLIVER ZHANG SCALE : N/A .XX a bel group G23-21YR-010 PA.DWG **DATE** 2018-10-19 ±0,004 SIZE : A4

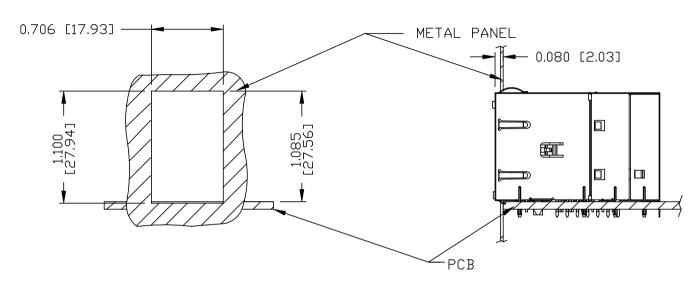
THE INFORMATION CONTAINED HEREIN IS CONSIDERED **RoHS** "PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED WITHOUT THE PRELIMINARY WRITTEN APPROVAL OF BEL FUSE INC. 0,500 [12,70] 31 PLACES 0.225 [5.71] Ø0.062 [Ø1.57] 10 PLACES 0.050 [1.27] -0.500 [12.70] — 0.050 [1.27] [7,98] [11,43] [2,90] Ø0.040^{+0.005} ø_{1.02}+0.13 0.00_ 8 PLACES 0,450 0,314 0,214 [4,83] 9 ο φο 0 0,190 Ø0,128 [Ø3,25] 2 PLACES [4,75] 0,100 [2,54] PITCH 0,050 [1,27] PITCH 0,100 [2,54] PITCH 0.110 [2.79] [19,25] [26,49] [11,79] [30,15] [5,44] 577 [6,12] R0.030 [R0.76] 0.160 [4.06] 0,187 [4, 0,260 [6,60] 0,758 - 0,049 [1,24〕 0,241 1,043 0,214 0,180 1,187 46 0,350 [8,89] - 0.110 [2.79] Recommended PCB front edge 0.450 [11.43] cutout. The bottom shield ground tabs (front) should not be seated on the top of the PCB. 0.550 [13.97] SUGGESTED FOOTPRINT (COMPONENT SIDE VIEW) PΑ PAGE: 5 REV. : ORIGINATED BY TITLE PART NO. / DRAWING NO. STANDARD DIM [] METRIC DIM. SANDY I IN TOL. IN INCH AS REF. 2X1 10 Gigabit MagJack® G23-21YR-010 **DATE** 2018-10-19 MAGNETIC SOLUTIONS UNIT : INCH [mm] PATENTED DRAWN BY FILE NAME SCALE: N/A **DLIVER ZHANG** .XX a bel group G23-21YR-010 PA.DWG 2018-10-19 ±0.004 SIZE : A4 DC002(2)120214 This document is electronically generated. This is a controlled copy if used internally

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.

SUGGESTED PANEL OPENING

PRELIMINARY





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)

						101
	TITLE	PART NO. / DRAWING NO.	STAND.	ARD DIM.	[] METRIC DIM.	
SANDY LIN	2X1 10 Gigabit MagJack®	G23-21YR-010	TOL. IN INCH		AS REF.	
DATE 2018-10-19	PATENTED		X		UNIT : INCH [mm]	
DRAWN BY DLIVER ZHANG	I HILINILD	FILE NAME	.xx		SCALE : N/A	l
		G23-21YR-010_PA,DWG		±0,005	* -1	l
DATE 2018-10-19			.XXX	±0,003	SIZE : A4	

REV. : PA PAGE : 6

MAGNETIC SOLUTIONS
a bel group