

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.

RoHS



ELECTRICAL CHARACTERISTICS @ 25°C

TURNS RATIO

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

DCI @ 100kHz/100mVRMS

8mA DC BIAS

INS. LOSS

- 0.1MHZ TO 1MHZ -1.1 dB MAX
- 1MHZ TO 65MHZ -0.5 dB MAX
- 65MHZ TO 100MHZ -0.8 dB MAX
- 100MHZ TO 125MHZ -1.2 dB MAX

RET. LOSS (MIN)

- 0.5MHZ-40MHZ -18 dB
- 40MHZ-100MHZ -12+20LOG(f/80MHZ) dB

CROSS TALK

- 100kHz - 100MHZ -33+20LOG(f/100MHZ)dB MIN
- CM TO CM REJ -30 dB MIN
- 100kHz - 100MHZ -35 dB MIN
- CM TO DM REJ -35 dB MIN
- 100kHz - 100MHZ 1500 Vrms

100% OF PRODUCTION TESTED TO COMPLY WITH IEEE 802.3 ISOLATION REQUIREMENT

LED 1

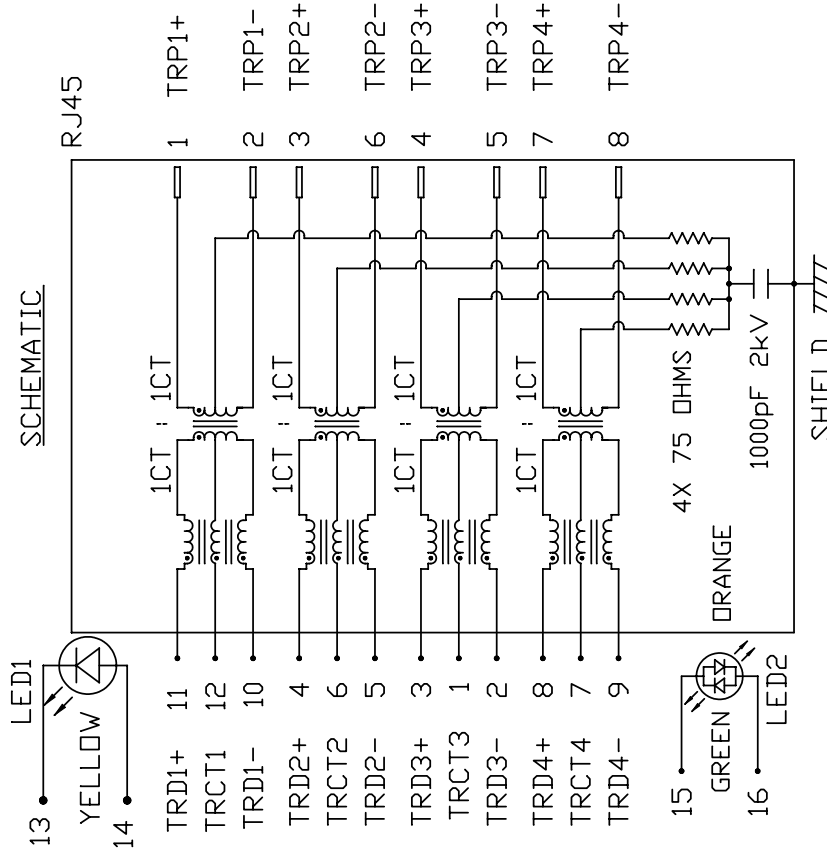
- VF (FORWARD VOLTAGE) IF=20mA YELLOW 2.1V TYP.
- AD (DOMINANT WAVELENGTH)IF=20mA YELLOW 590nm TYP.

LED 2

- VF (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP.
- ORANGE 2.0V TYP.
- AD (DOMINANT WAVELENGTH)IF=20mA GREEN 565nm TYP.
- ORANGE 610nm TYP.

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

SCHEMATIC



USB ELECTRICAL:

- INSULATION RESISTANCE: 1000 MEGAΩ (MIN)
- CONTACT RESISTANCE: 25 MILLIΩ (MAX)
- DIELECTRIC WITHSTANDING: 750 VAC

ORIGINATED BY		DATE		TITLE		PART NO. / DRAWING NO.		STANDARD DIM.		[] METRIC DIM. AS REFERENCE	
CHOW WANCHUNG		2012-08-07		gigabit MagJack @ Combo (single USB, 8 cores)		0821X1T43-F		TOL. IN INCH		UNIT : INCH [mm]	
DRAWN BY		DATE		0821-1X1T-43-F PATENTED		FILE NAME		.X		REV. : C	
TAN QIGUANG		2012-08-07				0821X1T43-F_C.DWG		.XX		SCALE : N/A	
								.XXX		SIZE : A4	
										PAGE : 2	

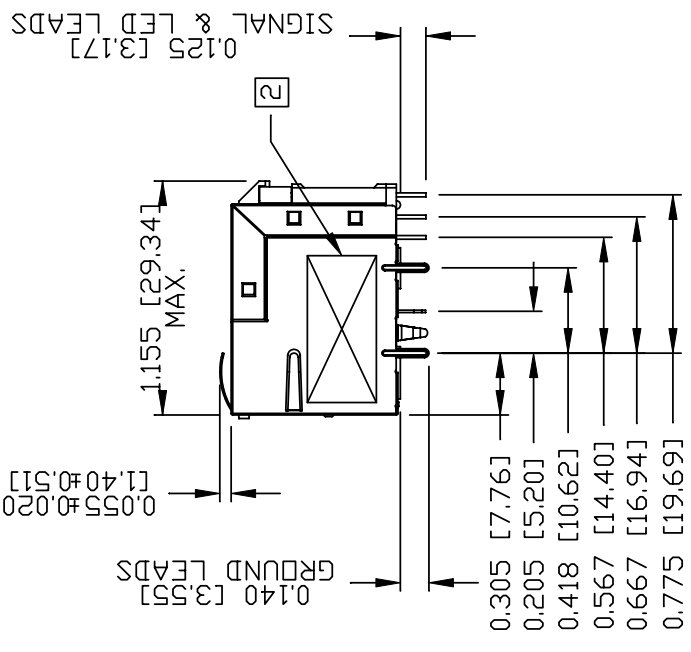
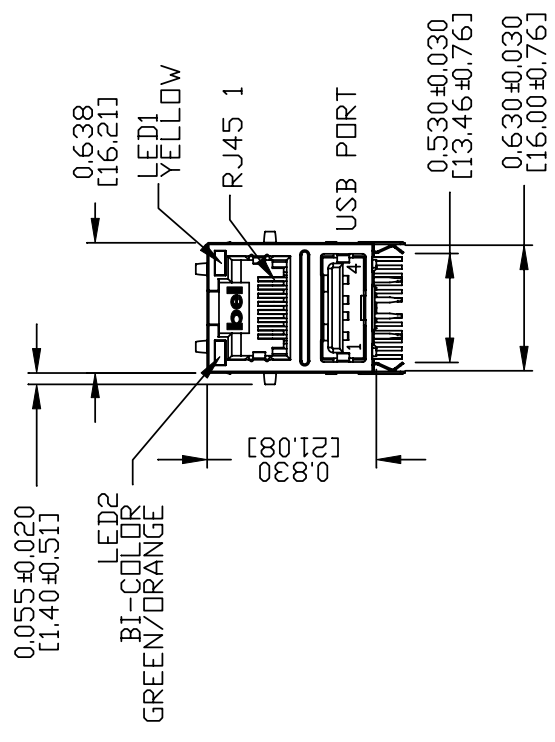


COMPONENTS THAT COMPLY WITH RoHS

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



RJ45 MECHANICAL:
 PLASTIC HOUSING: THERMOPLASTIC PBT
 FLAMMABILITY RATING UL 94V-0
 CONTACT PLATING: 30 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT.
 PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.
 METAL SHIELD: NICKEL PLATED ON COPPER ALLOY.
 (ALL GROUND LEADS ARE SOLDER DIPPED)
AVUS UL RECOGNIZED - FILE #E196366 AND E169987.
 1. MARK PART WITH MFG. LOGO, MFG. NAME, PART NUMBER AND DATE CODE.
 2. MARKING "PATENTED".

USB MECHANICAL:
 MATING FORCE: 35 NEWTONS MAXIMUM
 UNMATING FORCE: 10 NEWTONS MINIMUM
 CONTACT: PROSPHER BRONZE
 30 MICRO-INCH MIN GOLD PLATING ON CONTACT AREA AND LEAD-FREE TIN ON SOLDER LEADS.

3. THE PRODUCT IS RoHS COMPLIANT.
4. THE PRODUCT IS PATENTED, THE PATENT NUMBER ARE U.S. PAT. 5,736,910 AND U.S. PAT. 7,123,117.

ORIGINATED BY ANTON LIAD	DATE 2012-08-07	TITLE gigabit MagJack @ Combo (single USB, 8 cores)	PART NO. / DRAWING NO. 0821X1T43-F	STANDARD DIM. TOL. IN INCH	[] METRIC DIM. AS REFERENCE
DRAWN BY HE ZHEN	DATE 2012-08-07	FILE NAME 0821-1X1T-43-F PATENTED	UNIT : INCH [mm] N/A	SCALE : -X -XX -XXX	REV. : C SIZE : A4 PAGE : 3

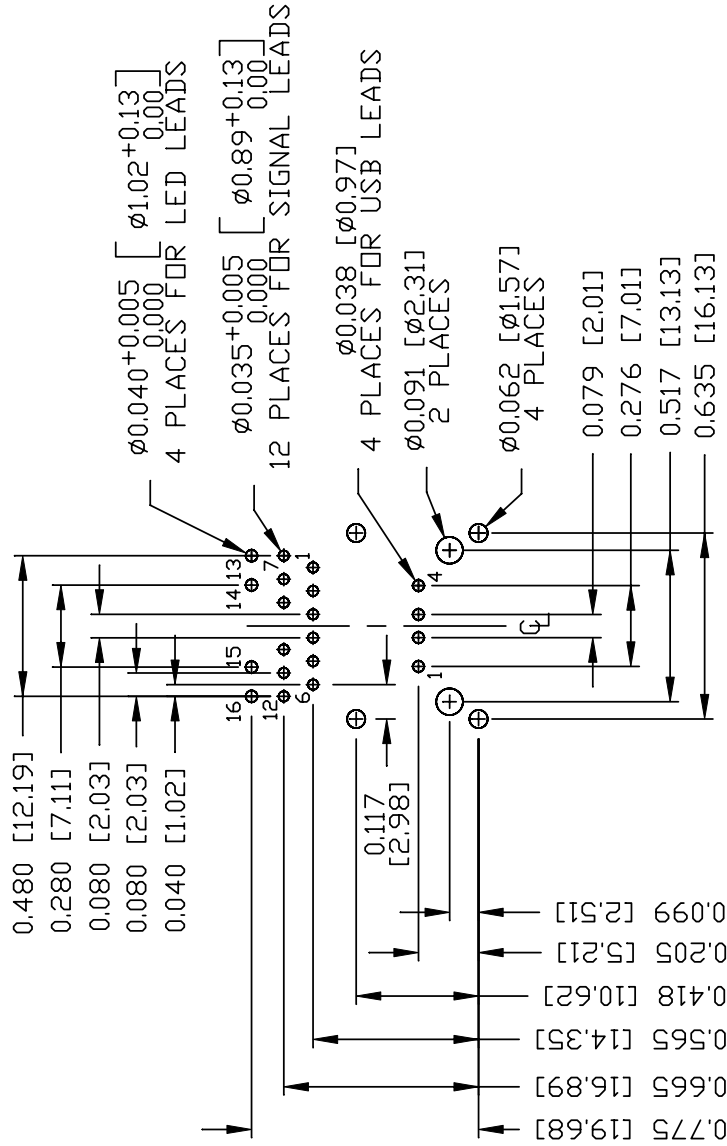
This document is electronically generated. This is a controlled copy if used internally



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.



RECOMMENDED PCB FOOTPRINT
COMPONENT SIDE VIEW



ORIGINATED BY ANTON LIAD	DATE 2012-08-07	TITLE Gigabit MagJack® Combo (single USB, 8 cores) 0821-1X1T-43-F PATENTED	PART NO. / DRAWING NO. 0821X1T43-F	FILE NAME 0821X1T43-F_C.DWG	STANDARD DIM. TOL. IN INCH .X .XX .XXX	[] METRIC DIM. AS REFERENCE		
	UNIT : INCH [mm]					SCALE : N/A	REV. : C	
DRAWN BY HE ZHEN	DATE 2012-08-07				±0.004	SIZE : A4	PAGE : 4	

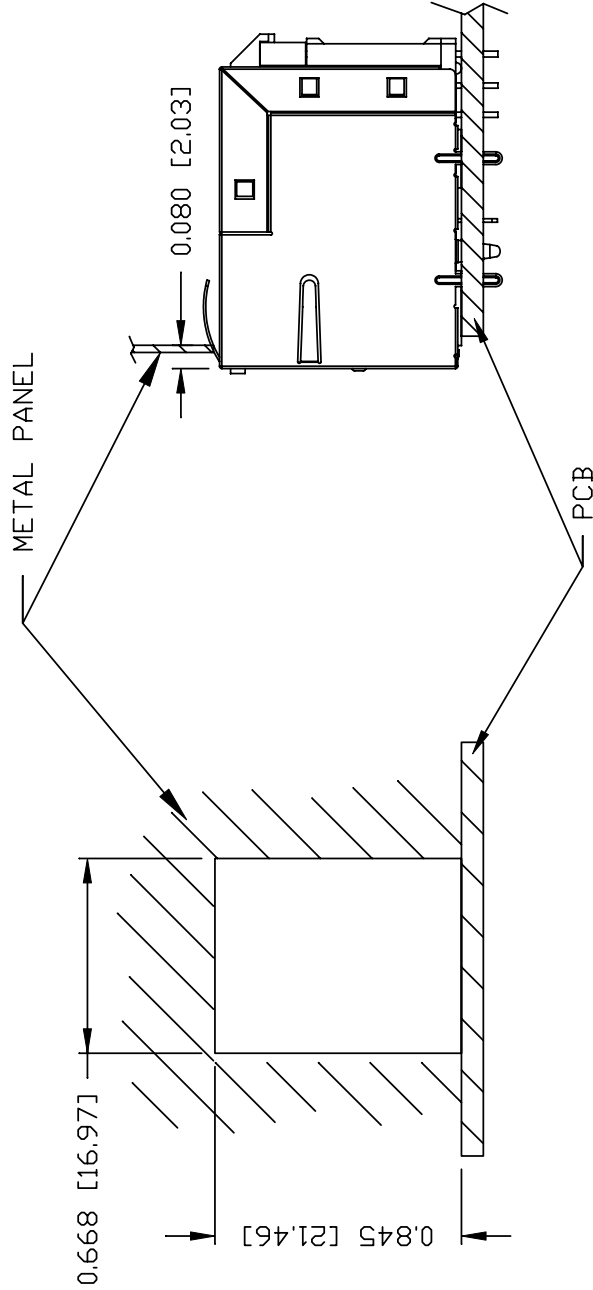


COMPONENTS OF A
PLANNED

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



NOTES:

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 : 0200-0148-48 (TOP)

0200-0148-49 (BOTTOM)

PACKING QUANTITY : 60 PCS FINISHED GOODS PER TRAY

8 TRAYS (480 PCS FINISHED GOODS) PER CARTON BOX

NOTE : CARDBOARDS ARE PLACED BETWEEN LAYERS OF PACKING TRAY INSIDE CARTON BOX
<INCLUDE THE UPPERMOST AND LOWERMOST TRAY>

ORIGINATED BY ANTON LIAO	DATE 2012-08-07
DRAWN BY HE ZHEN	DATE 2012-08-07

TITLE gigabit MagJack® Combo (single USB, 8 cores) 0821-1X1T-43-F PATENTED	
--	--

PART NO. / DRAWING NO. 0821X1T43-F	STANDARD DIM. TOL. IN INCH .X .XX .XXX
FILE NAME 0821X1T43-F_C.DWG	±0.004

[] METRIC DIM. AS REFERENCE	REV. : C
UNIT : INCH [mm]	SIZE : A4
SCALE : N/A	PAGE : 5

