

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

## URNS RATIO

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

CL @ 100kHz/100mVRMS

8mA DC BIAS 350µH MIN.

## 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

100kHz - 100MHz -30 dB MIN

## CM TO DM REJ

100kHz - 100MHz -35 dB MIN

HIPOT (Isolation Voltage): 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.

λD (DOMINANT WAVELENGTH)IF=20mA YELLOW 590nm TYP.

## LED 2

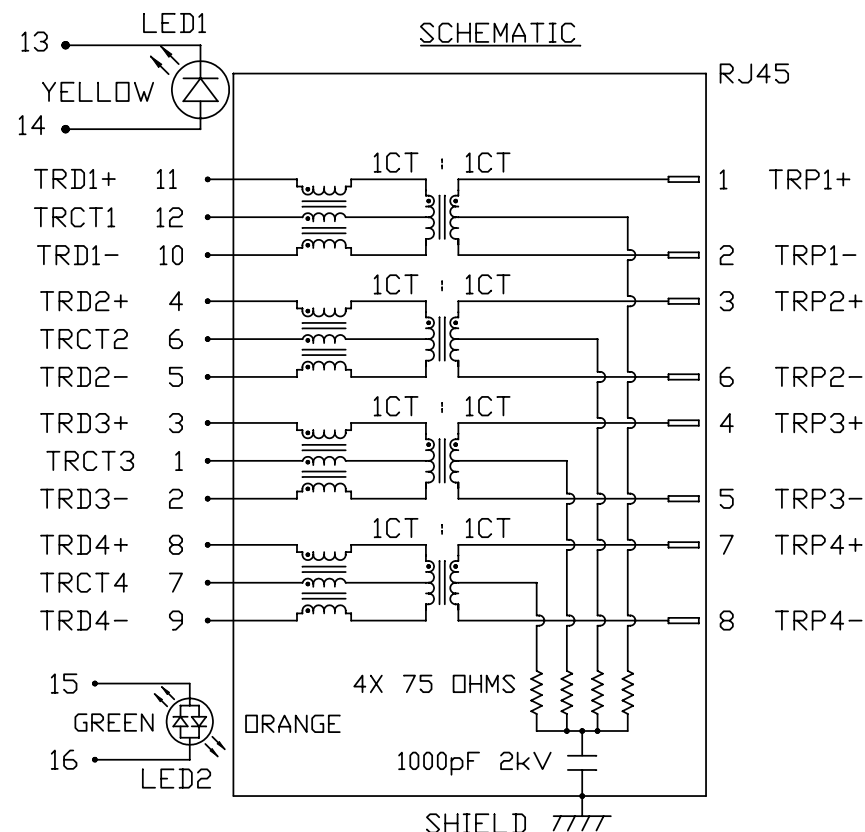
VF (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP.

ORANGE 2.0V TYP.

λD (DOMINANT WAVELENGTH)IF=20mA GREEN 565nm TYP.

ORANGE 610nm TYP.

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



## 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	bel COMPONENTS FOR A CONNECTED PLANET
CHOW WANCHUNG	2012-08-07	gigabit MagJack® Combo (single USB, 8 cores) 0821-1X1T-43-F PATENTED	08211X1T43-F	TOL. IN INCH	UNIT : INCH [mm]	
DRAWN BY	DATE			.X	SCALE : N/A	
TAN QIGUANG	2012-08-07			.XX	SIZE : A4	
			FILE NAME	.XXX	PAGE : 2	
			08211X1T43-F_C.DWG			

DC002(2)081111

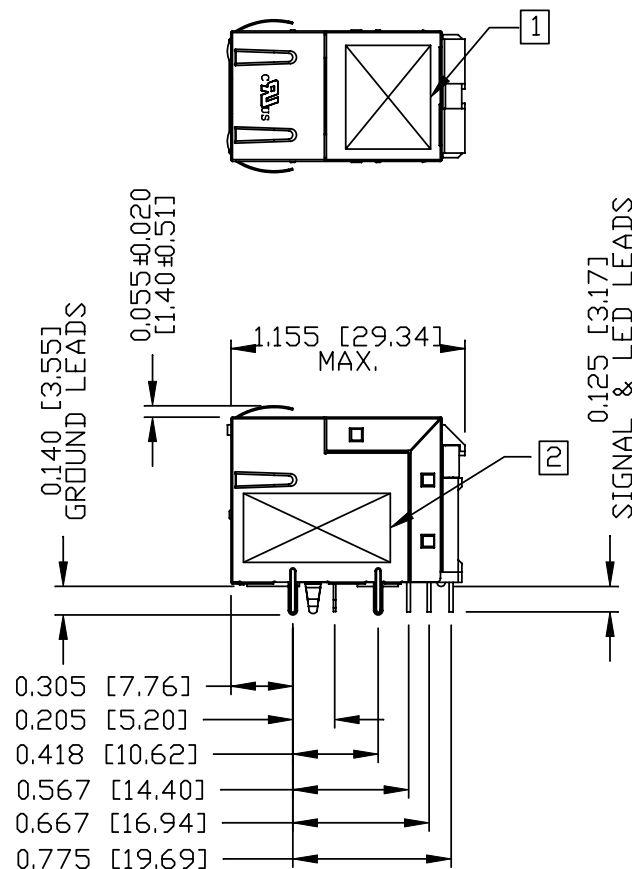
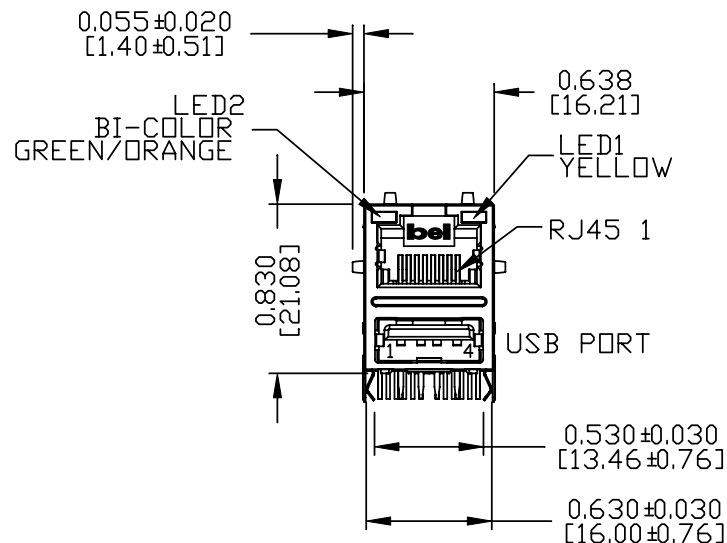
This document is electronically generated. This is a controlled copy if used internally

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.

RoHS



# 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)

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: PROSPER 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.

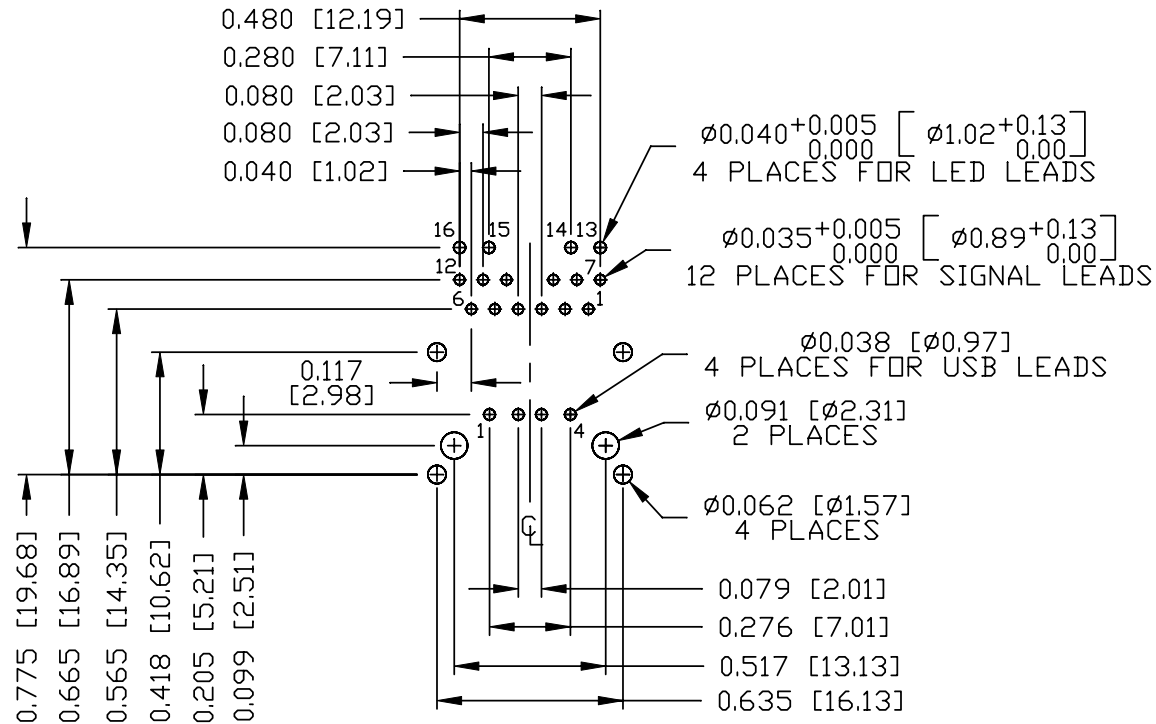
ORIGINATED BY	DATE	TITLE	PART NO. / DRAWING NO.	STANDARD DIM.	[ ] METRIC DIM. AS REFERENCE		
ANTON LIAO	2012-08-07	gigabit MagJack® Combo (single USB, 8 cores) 0821-1X1T-43-F PATENTED	08211X1T43-F	TOL. IN INCH	UNIT : INCH [mm]	REV. : C	
DRAWN BY	DATE			.X	SCALE : N/A	SIZE : A4	
HE ZHEN	2012-08-07			.XX		PAGE : 3	
				.XXX	±0.010		





RECOMMENDED PCB FOOTPRINT

COMPONENT SIDE VIEW



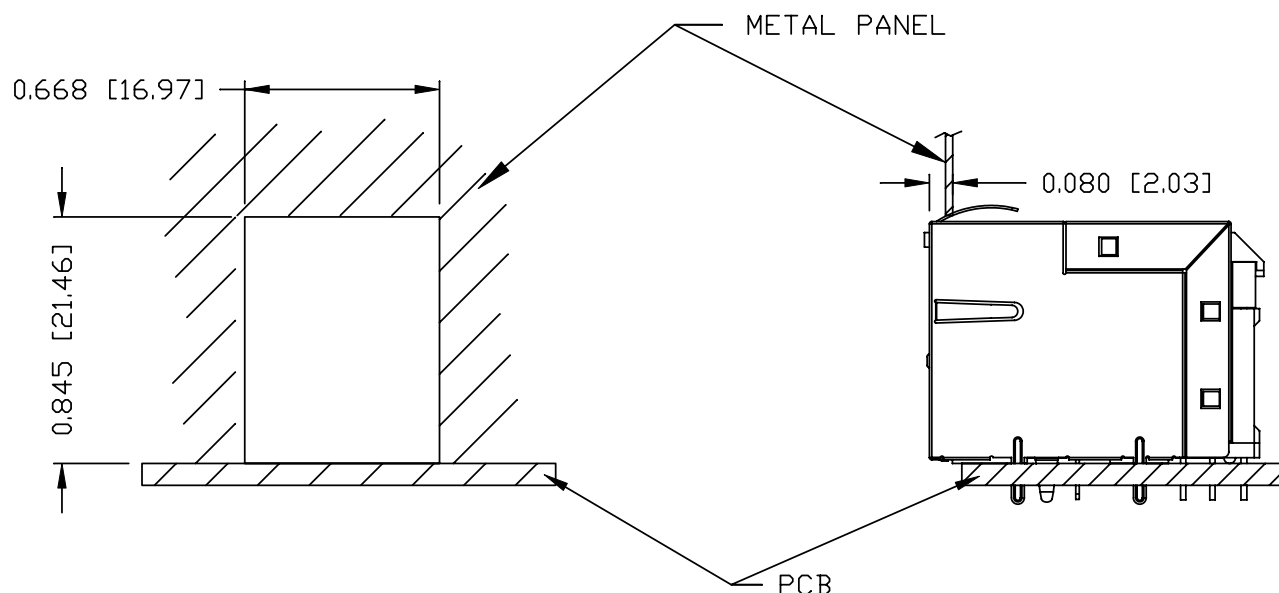
ORIGINATED BY ANTON LIAO	DATE 2012-08-07	TITLE gigabit MagJack® Combo (single USB, 8 cores) 0821-1X1T-43-F PATENTED	PART NO. / DRAWING NO. 08211X1T43-F	STANDARD DIM. TOL. IN INCH		[ ] METRIC DIM. AS REFERENCE	
				.X		UNIT : INCH [mm]	REV. : C
DRAWN BY HE ZHEN	DATE 2012-08-07		FILE NAME 08211X1T43-F_C.DWG	.XX		SCALE : N/A	SIZE : A4
				.XXX	±0.004		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.

RoHS



### 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	TITLE gigabit MagJack® Combo (single USB, 8 cores) 0821-1X1T-43-F PATENTED	PART NO. / DRAWING NO. 08211X1T43-F FILE NAME 08211X1T43-F_C.DWG	STANDARD DIM. TOL. IN INCH		[ ] METRIC DIM. AS REFERENCE	
				.X		UNIT : INCH [mm]	REV. : C
DRAWN BY HE ZHEN	DATE 2012-08-07			.XX		SCALE : N/A	SIZE : A4
				.XXX	±0.004		PAGE : 5

