



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

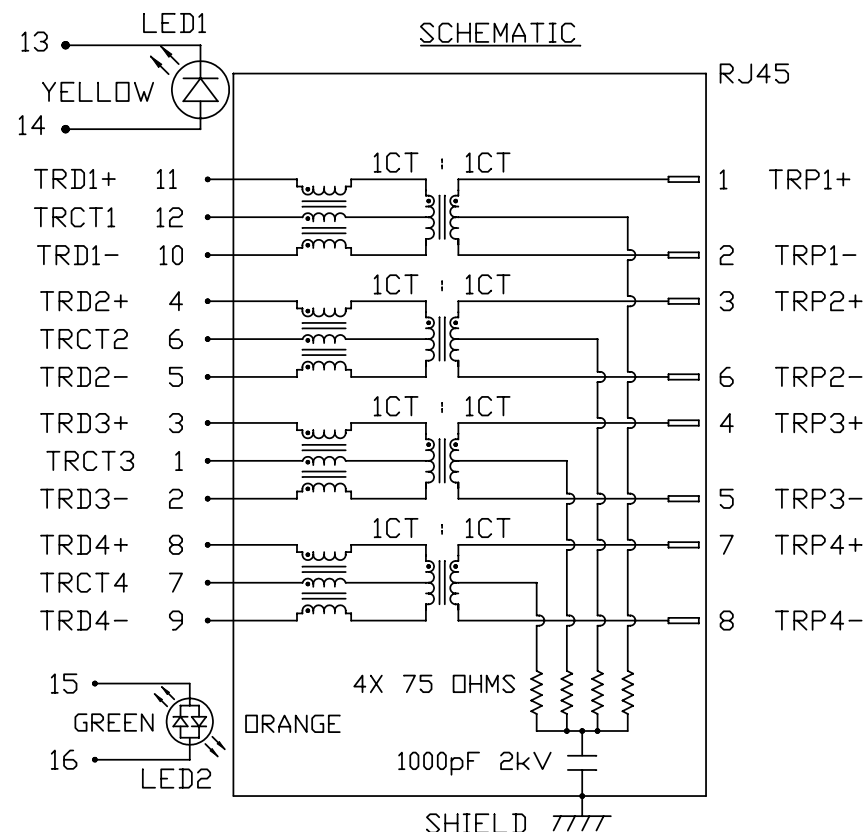
VF (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP.

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

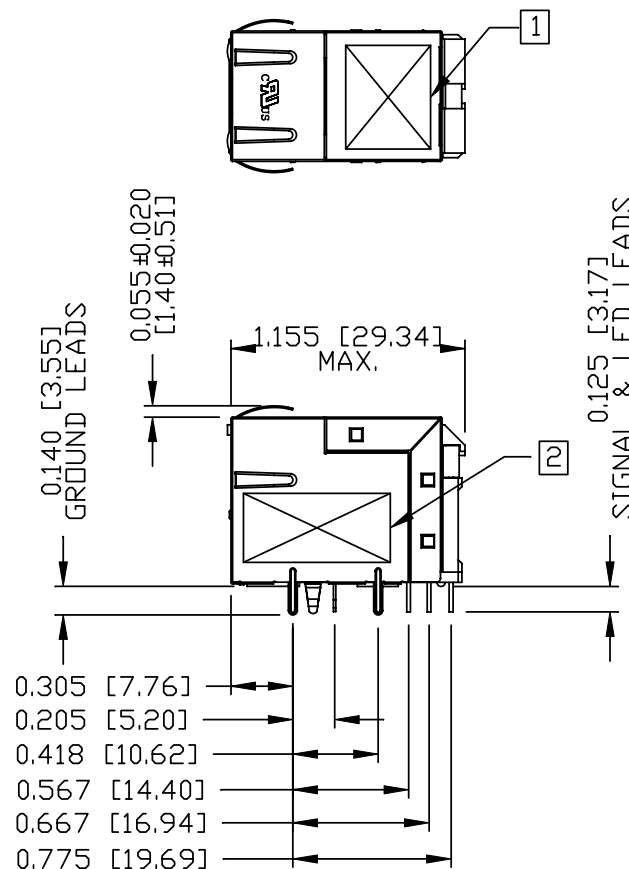
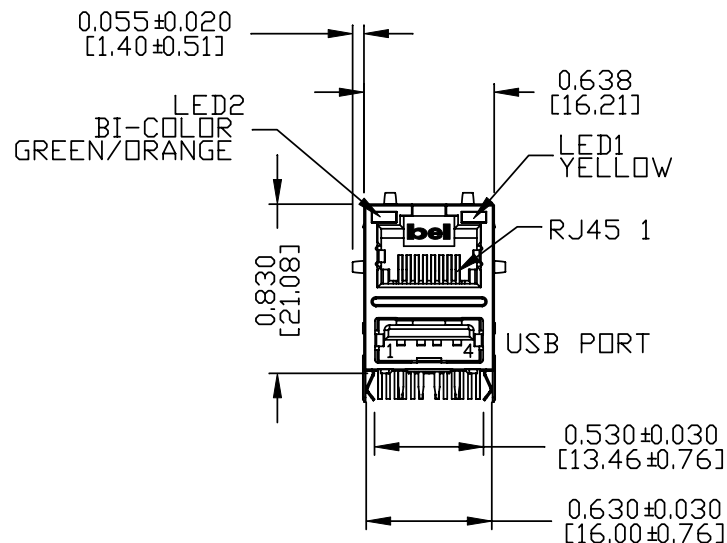
ORIGINATED BY	DATE	TITLE	PART NO. / DRAWING NO.	STANDARD DIM.	[] METRIC DIM. AS REFERENCE
CHOW WANCHUNG	2012-08-07	gigabit MagJack® Combo (single USB, 8 cores)	08211X1T43-F	TOL. IN INCH	UNIT : INCH [mm] REV. : C
DRAWN BY	DATE		FILE NAME		SCALE : N/A SIZE : A4
TAN QIGUANG	2012-08-07	0821-1X1T-43-F PATENTED	08211X1T43-F_C.DWG	.X .XX .XXX	⊕ ⊖ PAGE : 2

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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.

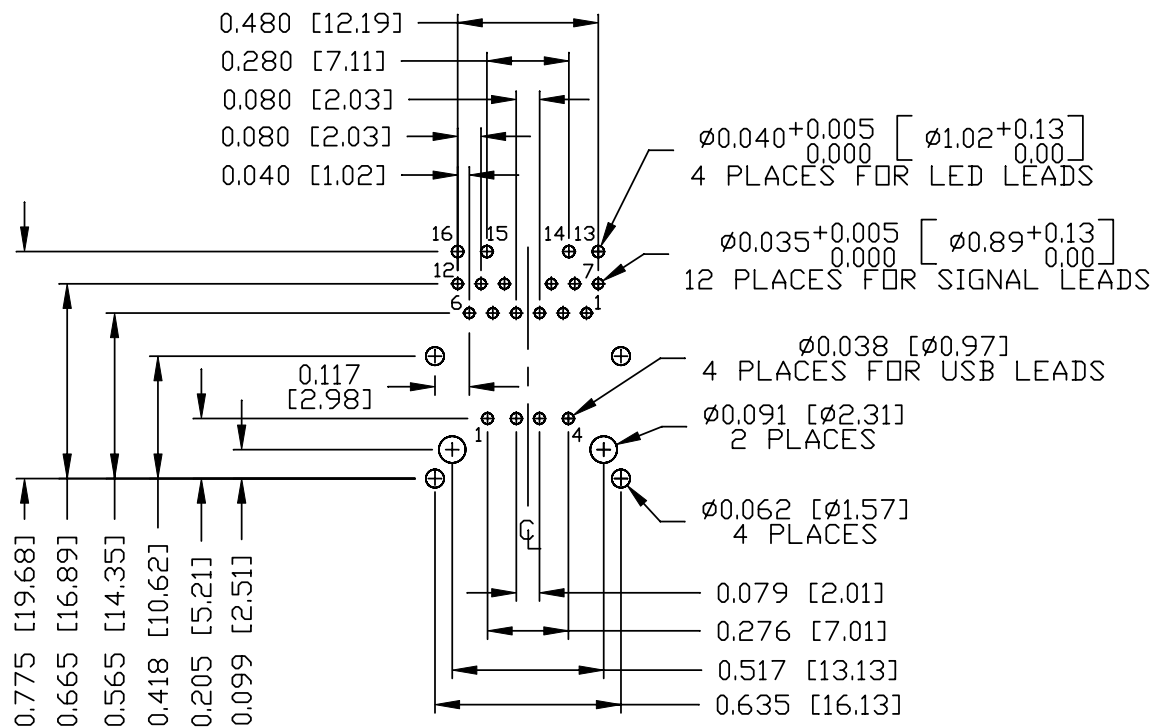
ORIGINATED BY	DATE	TITLE	PART NO. / DRAWING NO.	STANDARD DIM.		[] METRIC DIM. AS REFERENCE	
				TOL. IN INCH		UNIT : INCH [mm]	REV. : C
ANTON LIAO	2012-08-07	gigabit MagJack® Combo (single USB, 8 cores) 0821-1X1T-43-F PATENTED	08211X1T43-F	.X		SCALE : N/A	SIZE : A4
DRAWN BY	DATE			.XX		⊕	PAGE : 3
HE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






RECOMMENDED PCB FOOTPRINT

COMPONENT SIDE VIEW

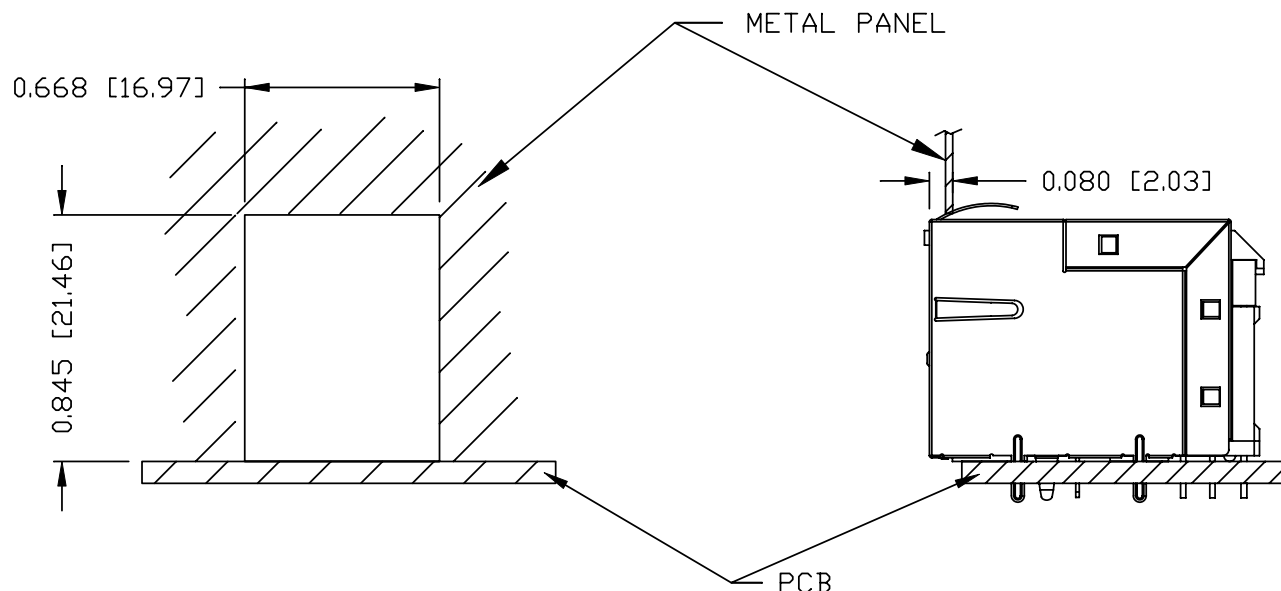


ORIGINATED BY ANTON LIAO	DATE 2012-08-07	TITLE gigabit MagJack® Combo (single USB, 8 cores) 0821-1X1T-43-F PATENTED	PART NO. / DRAWING NO. 08211X1T43-F	STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REFERENCE		<div>bel</div> <div>COMPONENTS-OR-A CONNECTED PLANET</div>
DRAWN BY HE ZHEN	DATE 2012-08-07		FILE NAME 08211X1T43-F_C.DWG	.X		UNIT : INCH [mm]	REV. : C	
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				.XXX	±0.004		PAGE : 4	

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SUGGESTED PANEL OPENING

RoHS



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)

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DRAWN BY HE ZHEN	DATE 2012-08-07		FILE NAME 08211X1T43-F_C.DWG	.X		UNIT : INCH [mm]	REV. : C	
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				.XXX	±0.004		PAGE : 5	



Mouser Electronics

Authorized Distributor

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Bel:

[0821-1X1T-43-F](#)