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

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

**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 REQUIREMENTS.

OPERATING TEMPERATURE: -40°C TO +85°C

**LED 1**

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

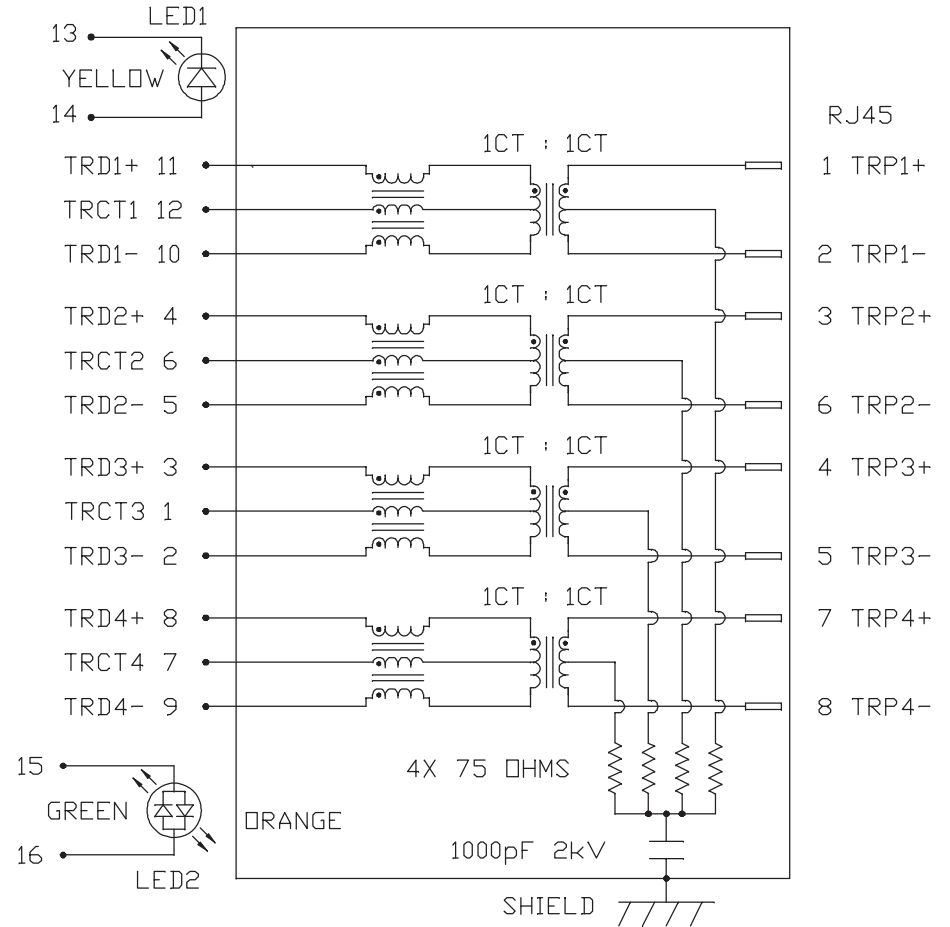
**LED 2**

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

**USB ELECTRICAL:**

INSULATION RESISTANCE:	1000 MEGA (MIN)
CONTACT RESISTANCE:	25 MILLI Ω (MAX)
DIELECTRIC WITHSTANDING:	750 VAC

**SCHEMATIC**



**ORIGINATED BY**  
 CHOW WANCHUNG  
**DATE** 2015-10-13  
**DRAWN BY**  
 MURPHY LEE  
**DATE** 2015-10-13

**TITLE**  
 gigabit MagJack® Combo  
 (Single USB)  
 Extended temperature  
 0821-1X1T-32-F  
 PATENTED

**PART NO. / DRAWING NO.**  
 08211X1T32-F  
**FILE NAME**  
 08211X1T32-F\_C.DWG

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

REV. : C PAGE : 2

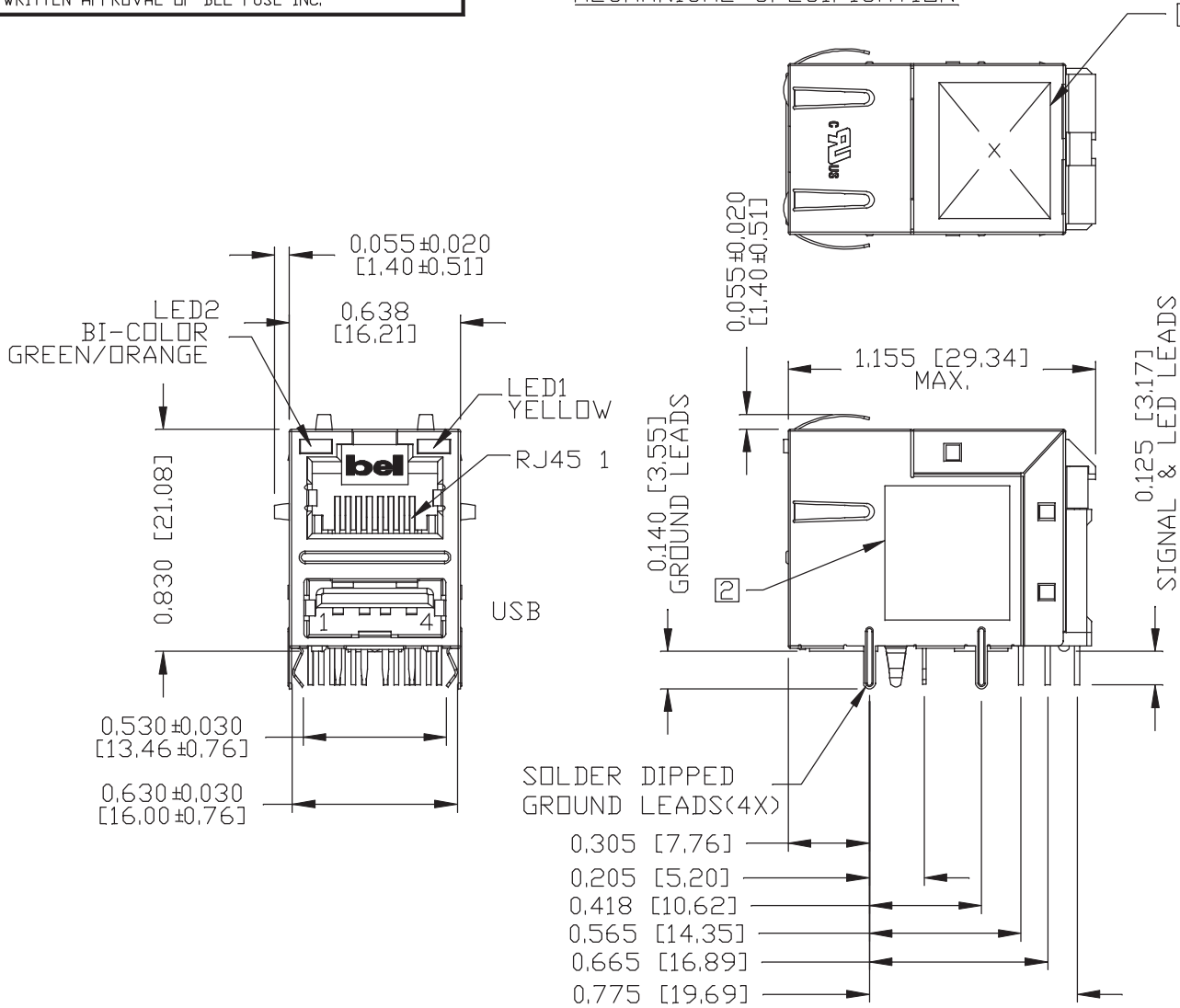


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MECHANICAL SPECIFICATION



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)

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 TIN ON SOLDER TAIL.

- ① MARK PART WITH MFG. LOGO, MFG. NAME, PART NUMBER AND DATE CODE.
- ② MARKING "PATENTED".
- 3. THE PRODUCT IS RoHS COMPLIANT.
- 4. THE PRODUCT IS PATENTED, THE PATENT NUMBER IS U.S. PAT. 7,123,117.

UL RECOGNIZED - FILE #E196366 AND E169987.

ORIGINATED BY  
ANTON LIAO  
DATE 2015-10-13

DRAWN BY  
JESSE LI  
DATE 2015-10-13

TITLE  
gigabit MagJack® Combo (Single USB)  
Extended temperature  
0821-1X1T-32-F  
PATENTED

PART NO. / DRAWING NO.  
08211X1T32-F

FILE NAME  
08211X1T32-F\_C.DWG

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

REV. : C PAGE : 3

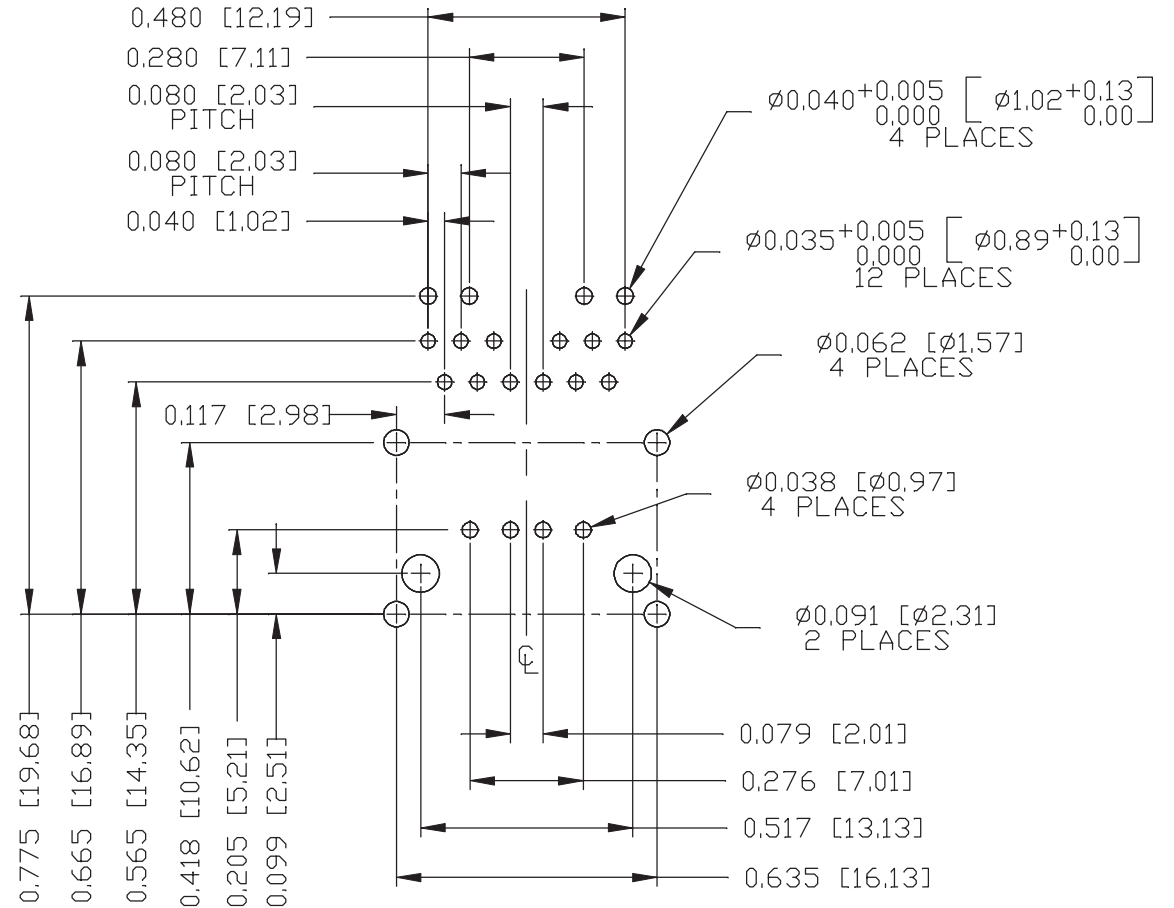
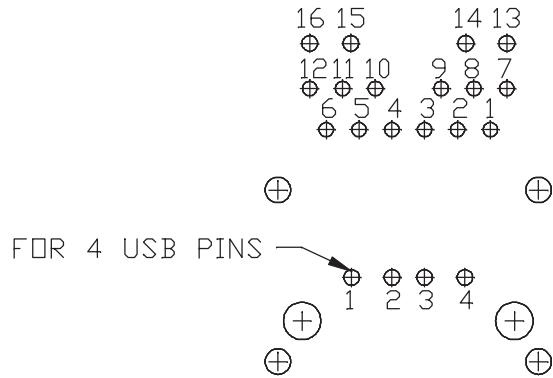


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RECOMMENDED PCB FOOTPRINT  
COMPONENT SIDE VIEW



REV. : C PAGE : 4

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ANTON LIAO  
DATE 2015-10-13  
DRAWN BY  
JESSE LI  
DATE 2015-10-13

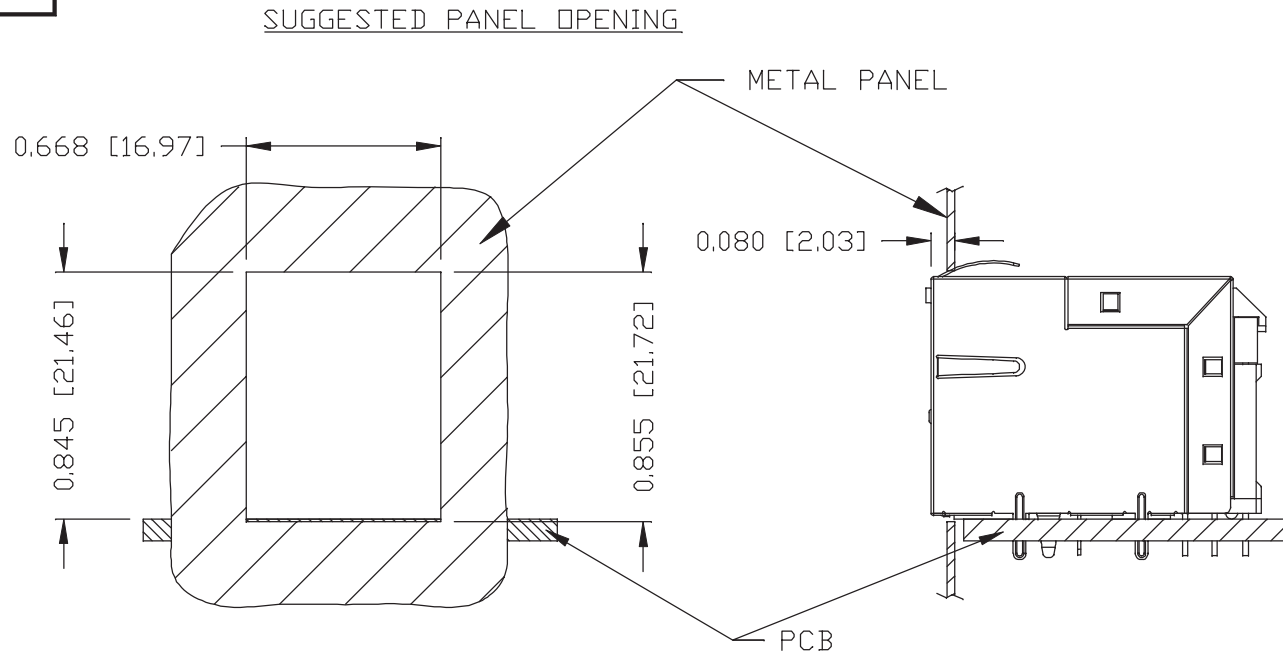
TITLE  
gigabit MagJack® Combo  
(Single USB)  
Extended temperature  
0821-1X1T-32-F  
PATENTED

PART NO. / DRAWING NO.  
08211X1T32-F  
FILE NAME  
08211X1T32-F\_C.DWG

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



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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)

REV. :	C	PAGE :	5
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ORIGINATED BY ANTON LIAO DATE 2015-10-13
DRAWN BY JESSE LI DATE 2015-10-13

TITLE gigabit MagJack® Combo (Single USB) Extended temperature 0821-1X1T-32-F PATENTED
---

PART NO. / DRAWING NO. 08211X1T32-F
FILE NAME 08211X1T32-F_C.DWG

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

