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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
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CM TO DM REJ

100kHz - 100MHz	-35 dB MIN
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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.

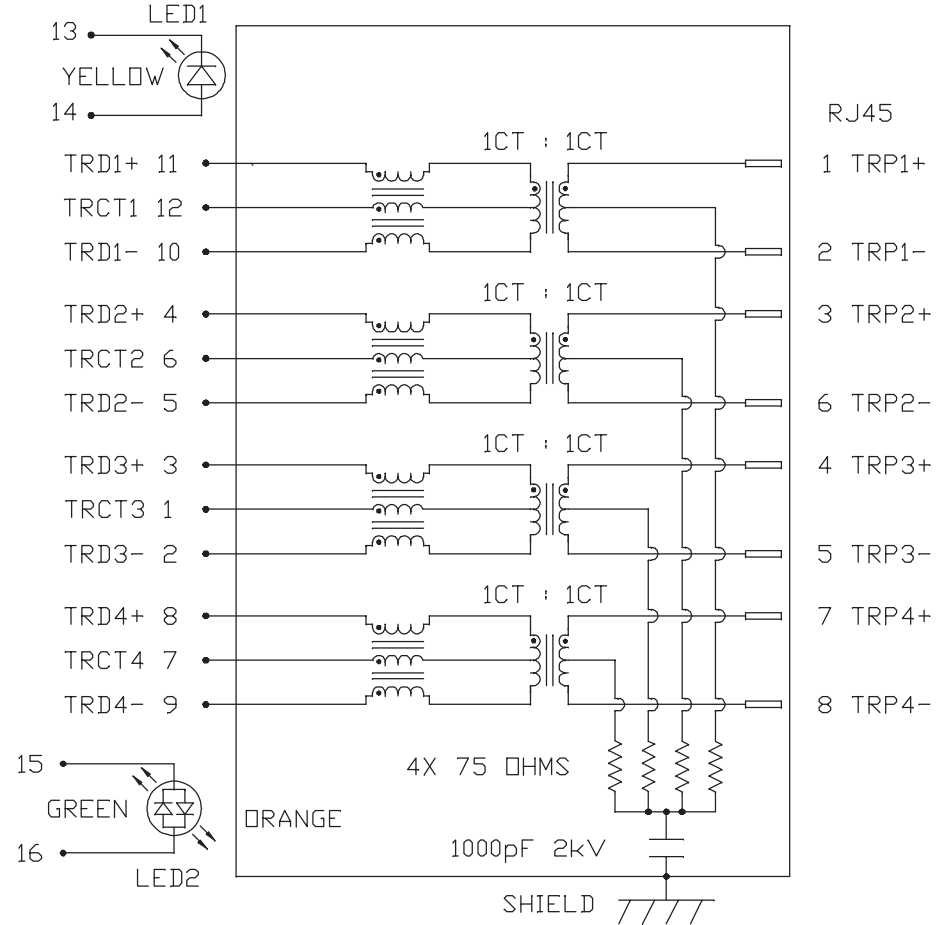
LED 2

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

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.
 UNIT : INCH [mm]
 SCALE : N/A
 SIZE : A4

REV. : C PAGE : 2

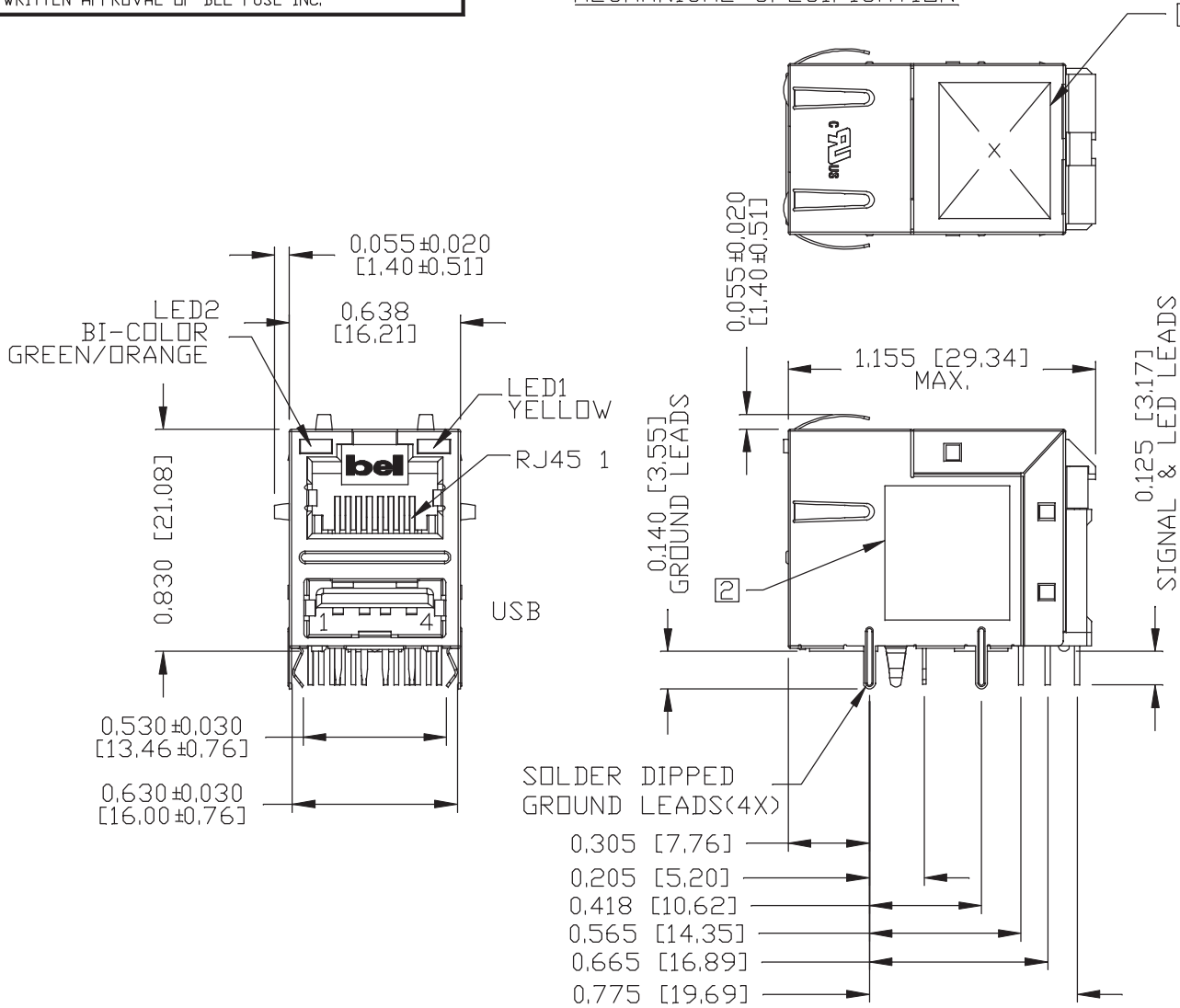


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MECHANICAL SPECIFICATION



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.

UL RECOGNIZED - FILE #E196366 AND E169987.

② MARKING "PATENTED".

3. THE PRODUCT IS RoHS COMPLIANT.

4. THE PRODUCT IS PATENTED, THE PATENT NUMBER IS U.S. PAT. 7,123,117.

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

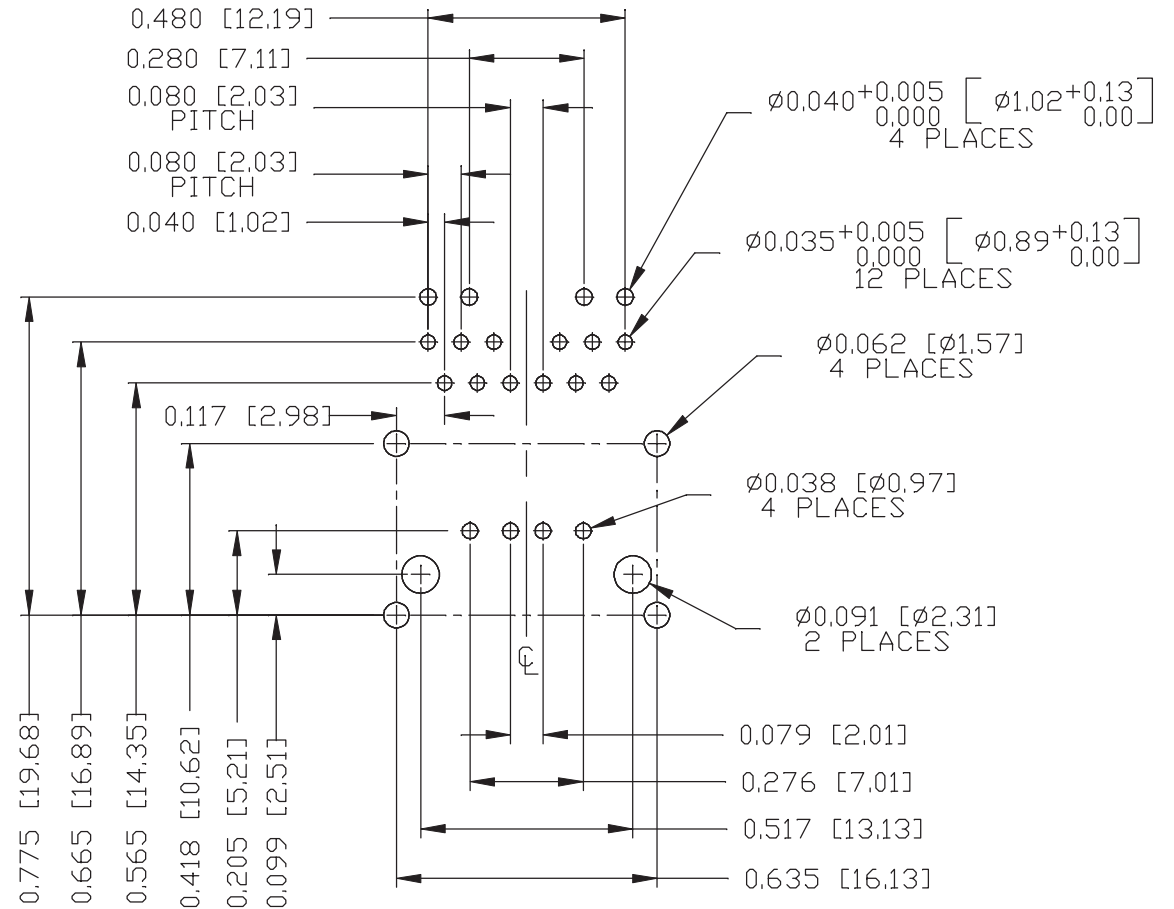
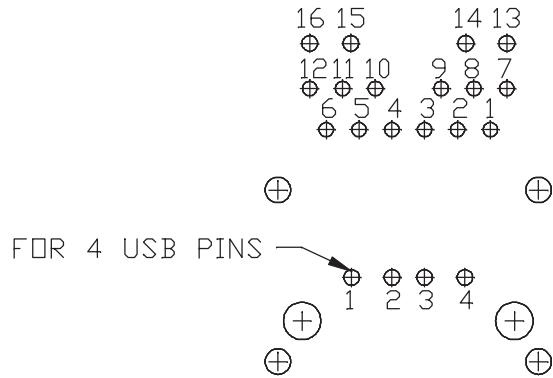


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RECOMMENDED PCB FOOTPRINT
COMPONENT SIDE VIEW



REV. : C PAGE : 4

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

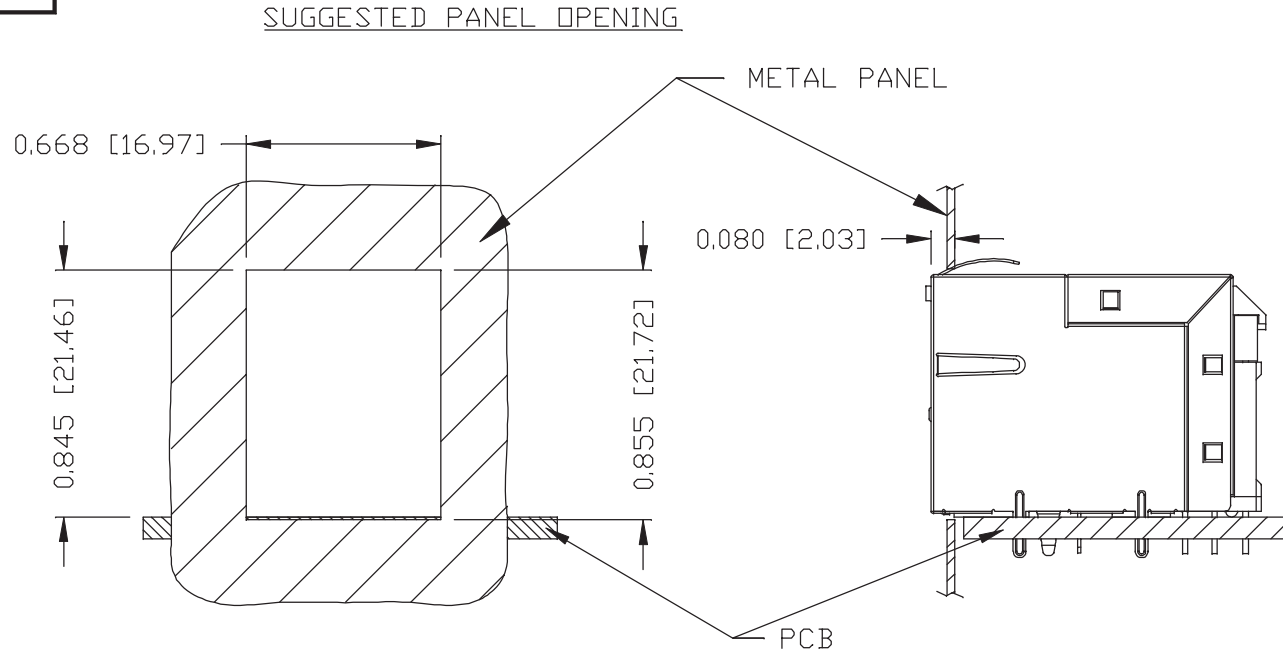
TITLE
gigabit MagJack® Combo
(Single USB)
Extended temperature
0821-1X1T-32-F
PATENTED

PART NO. / DRAWING NO.
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STANDARD DIM. TOL. IN INCH	[] METRIC DIM. AS REF.
.X	UNIT : INCH [mm]
.XX	SCALE : N/A
.XXX	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

