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ELECTRICAL CHARACTERISTICS @ 25°C

URNS RATIO

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

OCL @ 100kHz/100mVRMS

8mA DC BIAS	350µH MIN.
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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
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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 REQUIREMENT

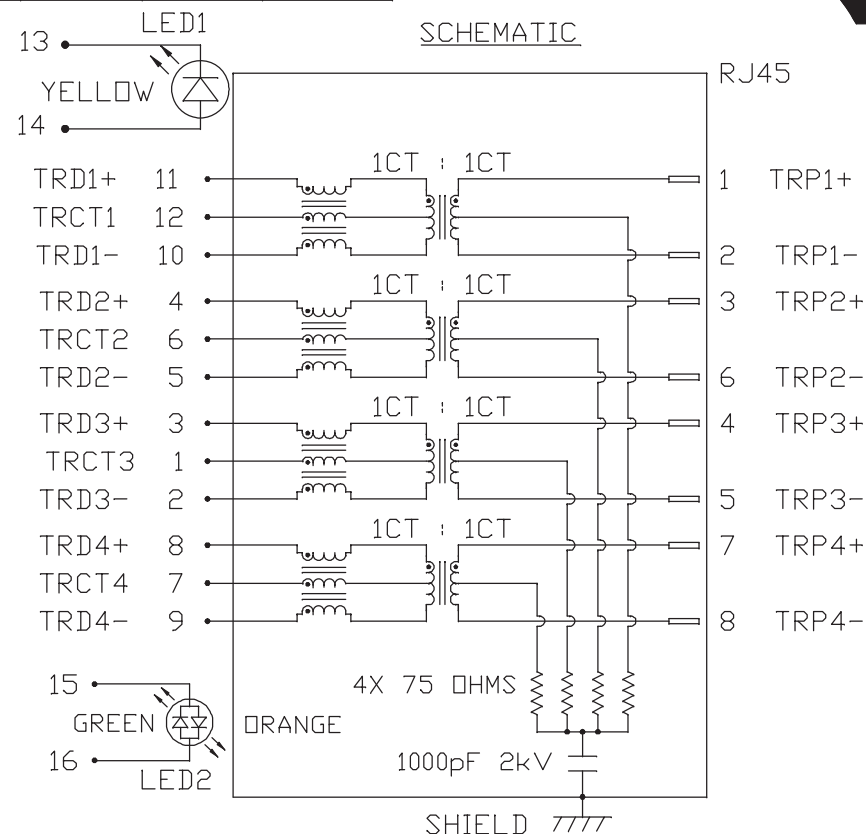
LED 1

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 570nm TYP.
ORANGE 605nm 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

RoHS



ORIGINATED BY
CHOW WANCHUNG
DATE 2015-10-13

TITLE

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

DRAWN BY
MURPHY LEE
DATE 2015-10-13

PART NO. / DRAWING NO.
08211X1T43-F

FILE NAME
08211X1T43-F_D.DWG

STANDARD DIM.
TOL. IN INCH

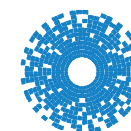
.X
.XX
.XXX

[] METRIC DIM.
AS REF.

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

REV. : D

PAGE : 2



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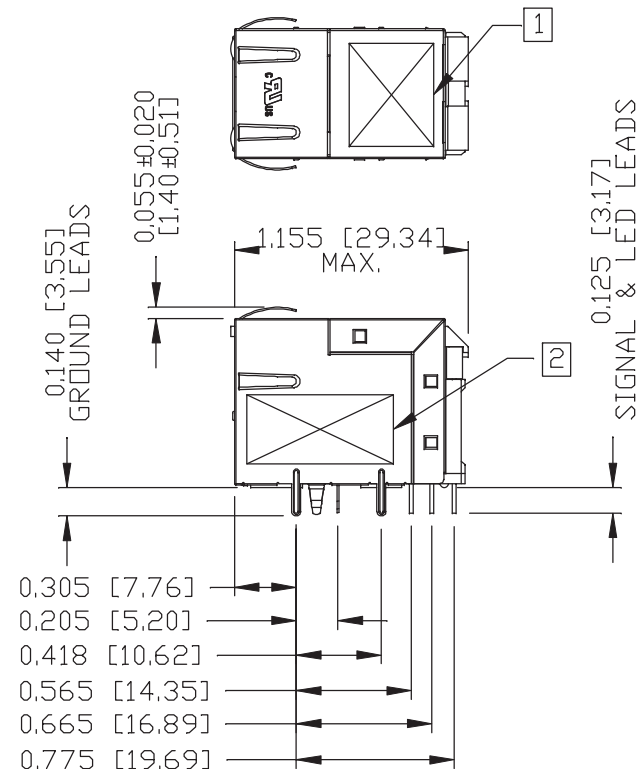
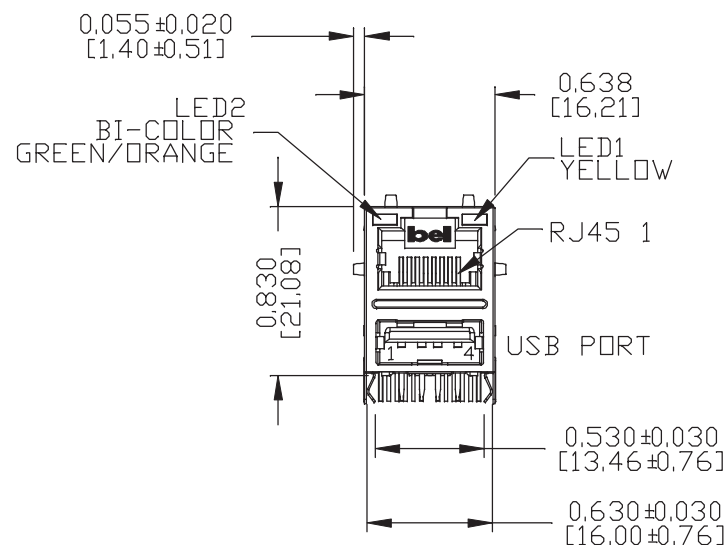
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Additional Resources: [Product Page](#) [3D Model](#) [PCB Footprint](#) [Technical Documentation](#)

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 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, 8 cores)
0821-1X1T-43-F
PATENTED

PART NO. / DRAWING NO.
08211X1T43-F

FILE NAME
08211X1T43-F_D.DWG

STANDARD DIM.
TOL. IN INCH

.X

.XX

.XXX

±0,010

[] METRIC DIM.
AS REF.

UNIT : INCH [mm]

SCALE : N/A

SIZE : A4

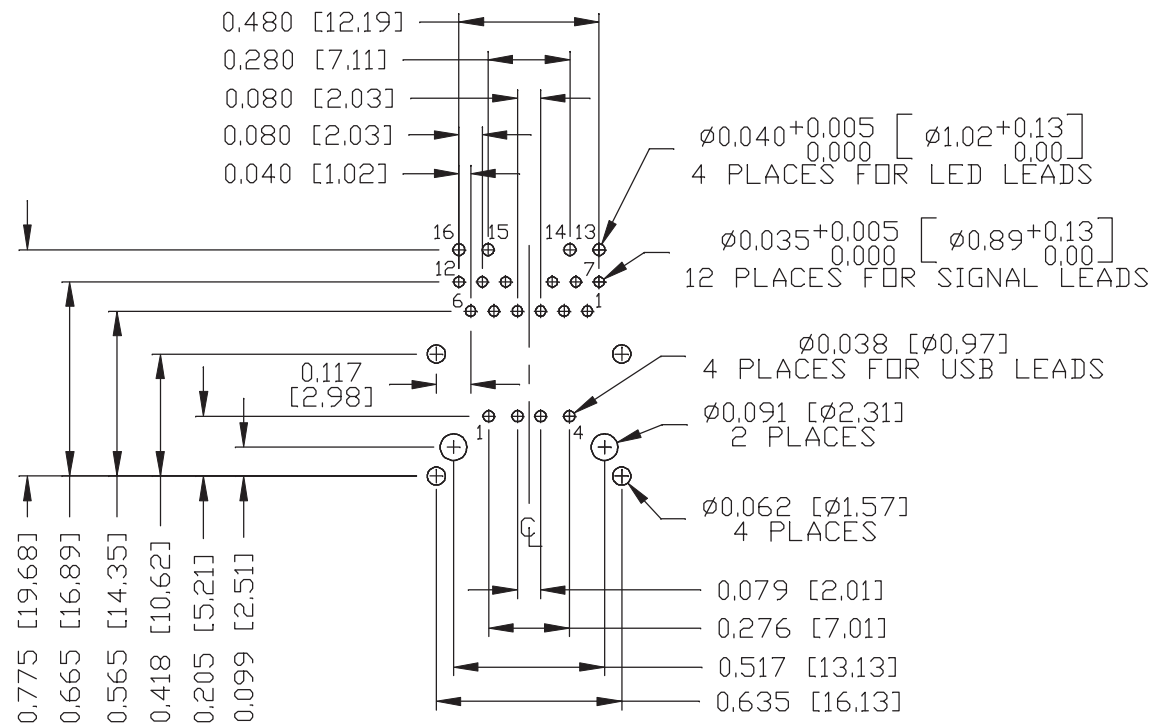
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PAGE : 3



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RECOMMENDED PCB FOOTPRINT
COMPONENT SIDE VIEW



ORIGINATED BY
ANTON LIAO
DATE 2015-10-13
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STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REF.
.X		UNIT : INCH [mm]
.XX		SCALE : N/A
.XXX	±0.004	SIZE : A4

REV. : D PAGE : 4



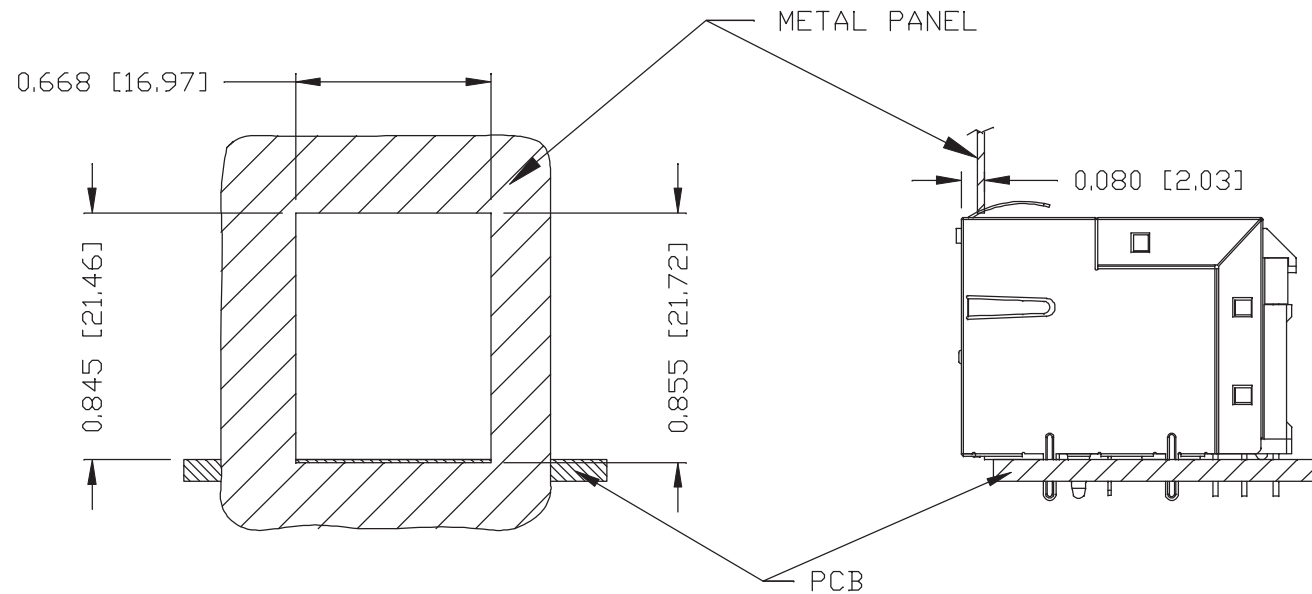
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SUGGESTED PANEL OPENING



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

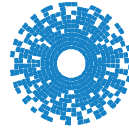
PACKING TRAY : 0200-0148-48 (TOP)

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)

REV. : D	PAGE : 5
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ORIGINATED BY ANTON LIAO DATE 2015-10-13	TITLE gigabit MagJack® Combo (single USB, 8 cores) 0821-1X1T-43-F PATENTED	PART NO. / DRAWING NO. 08211X1T43-F	STANDARD DIM.		[] METRIC DIM.	
			TOL. IN INCH		AS REF.	
			.X		UNIT : INCH [mm]	
			.XX		SCALE : N/A	
DRAWN BY JESSE LI DATE 2015-10-13		FILE NAME 08211X1T43-F_D.DWG	.XXX	±0.004		SIZE : A4