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LED1 POLARITY			LED2 POLARITY		
PIN 17	PIN 18	COLOR	PIN 19	PIN 20	COLOR
-	+	YELLOW	-	+	GREEN
			+	-	ORANGE

PRELIMINARY

RoHS  
2002/95/EC

RJ45

**ELECTRICAL CHARACTERISTICS @ 25°C**

**URNS RATIO**

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

DCL @ 100kHz, 20mVRMS AND 24mA DC BIAS FROM 0°C TO 70°C = 350uH MIN;  
PAIRS (1-2), (3-6), (4-5) AND (7-8).

**INS. LOSS**

0.1MHz TO 1MHz	-0.8 dB MAX
1MHz TO 65MHz	-0.6 dB MAX
65MHz TO 100MHz	-0.8 dB MAX
100MHz TO 125MHz	-1.7 dB MAX

**RET. LOSS (MIN)**

0.5MHz-40MHz	-18 dB
40MHz-100MHz	-12+20LOG(f/80MHz) dB

**CROSS TALK**

100kHz - 1MHz	-60dB MIN
1MHz - 100MHz	-35dB MIN

**CM TO CM REJ**

100kHz - 100MHz	-30 dB MIN.
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**CM TO DM REJ**

100kHz - 100MHz	-25dB MIN.
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**HIPOT (Isolation Voltage):**

	2250 VDC
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**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.

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

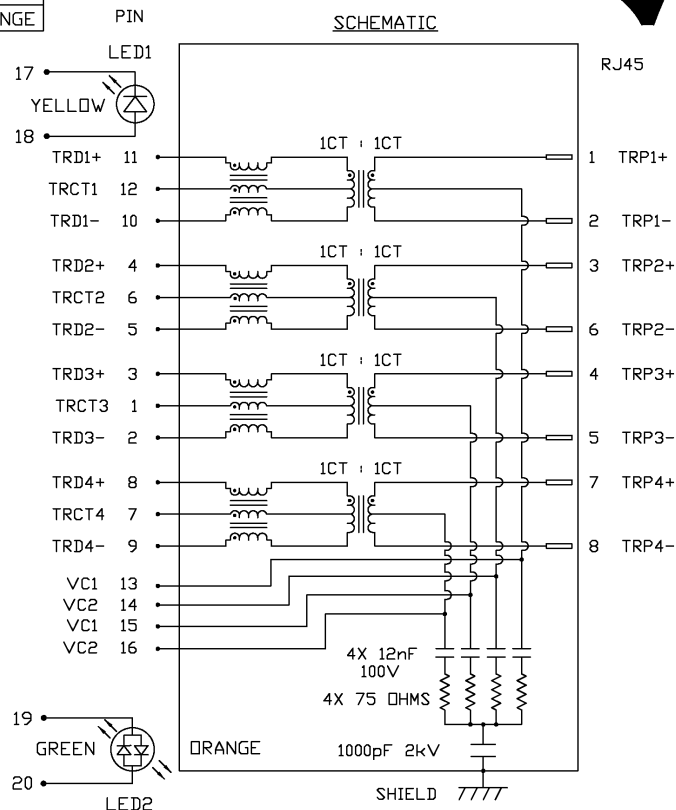
ORANGE 610nm TYP.

**DCR PINS CABLE SIDE (1-2), (3-6), (4-5) AND (7-8):**

1.0 OHMS MAX.

**BALANCED DC LINE CURRENT**

700 mA MAX. @ 57 VDC CONTINUOUS  
1.2A MAX. @ 57 VDC FOR 200 MILLISECONDS



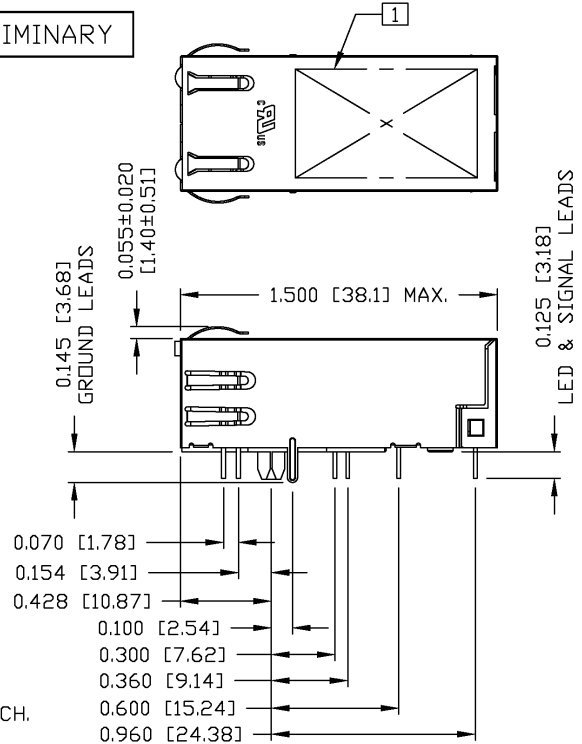
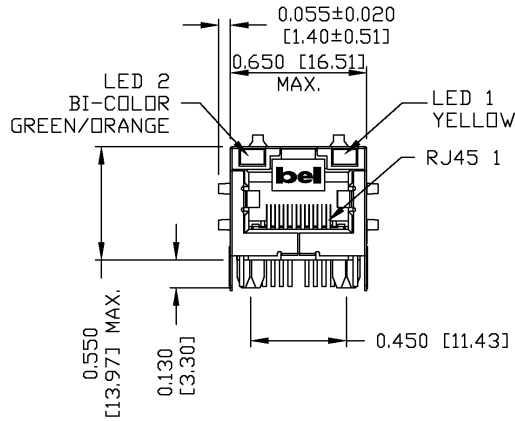
ORIGINATED BY	DATE	TITLE	PART NO. / DRAWING NO.	STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REFERENCE
CHUNG	06-29-06	gigabit MagJack® with PoEp	0838-1X1T-W7	.X	UNIT : INCH [mm] REV. : PC
DRAWN BY	DATE		FILE NAME	.XX	SCALE : N/A SIZE : A4
DE	06-29-06		08381X1TW7PC.DWG	.XXX	PAGE : 2



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MECHANICAL SPECIFICATION

PRELIMINARY



NOTES:

- PLASTIC HOUSING: THERMOPLASTIC PBT.  
FLAMMABILITY RATING UL 94V-0.
- CONTACTS: 50 MICRO-INCH HARD GOLD PLATING.
- OUTPUT PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH AND 0.016 INCH.
- METAL SHIELD: NICKEL PLATED ON COPPER ALLOY.
- (ALL GROUND LEADS ARE SOLDER DIPPED)

1. MARK PART WITH MFG LOGO, MFG NAME, PART NUMBER, AND DATE CODE.

**RoHS** UL RECOGNIZED - FILE #E196366 AND E169987.  
RoHS COMPLIANT, PER EU DIRECTIVE 2002/95/EC  
JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS.

ORIGINATED BY	DATE	TITLE	PART NO. / DRAWING NO.	STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REFERENCE
BILL	06-29-06	gigabit MagJack® with PoEp	0838-1X1T-W7	X	UNIT : INCH [mm] REV. : PC
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QIN	06-29-06		08381X1TW7PC.DWG	.XXX ±0.010	PAGE : 3



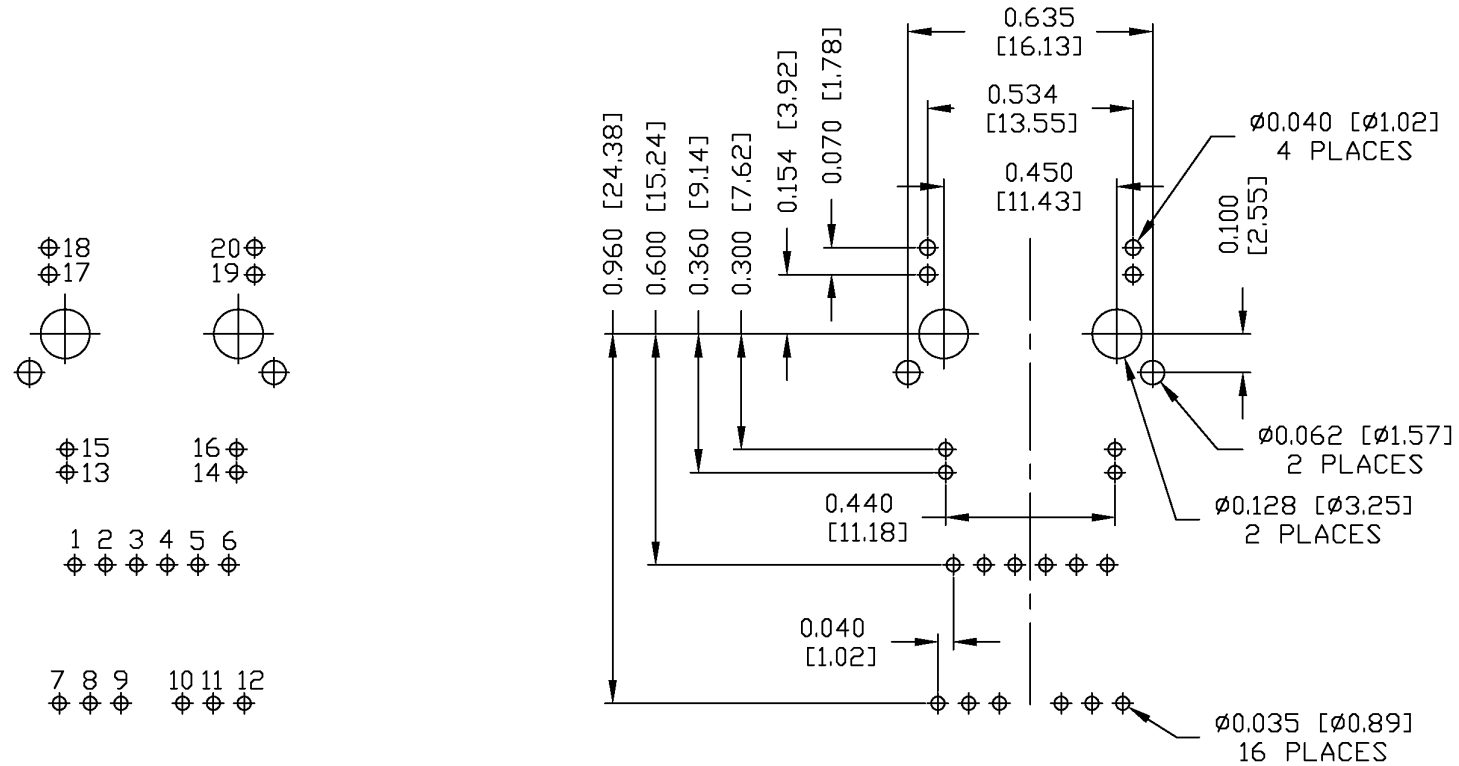
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RECOMMENDED PCB FOOTPRINT

PRELIMINARY



COMPONENT SIDE VIEW



ORIGINATED BY BILL	DATE 06-29-06	TITLE gigabit MagJack® with PoEp	PART NO. / DRAWING NO. 0838-1X1T-W7	STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REFERENCE
DRAWN BY QIN	DATE 06-29-06		FILE NAME 08381X1TW7PC.DWG	.X .XX .XXX ±0.004	UNIT : INCH [mm] SCALE : N/A REV. : PC
					SIZE : A4 PAGE : 4

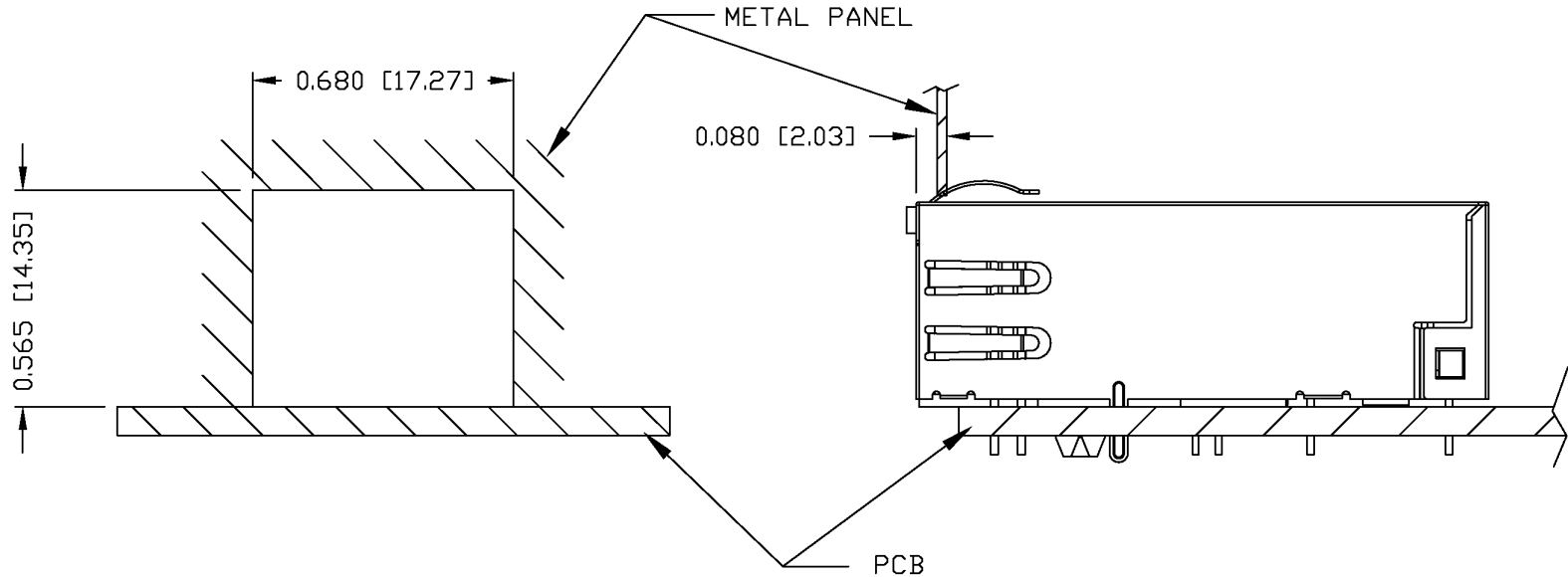


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PRELIMINARY

SUGGESTED PANEL OPENING



NOTE:

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 : 0200-9999-R3 (TOP)  
 0200-9999-R4 (BOTTOM)

PACKING QUANTITY : 42 PCS FINISHED GOODS PER TRAY  
 10 TRAYS (420 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 BILL	DATE 06-29-06	TITLE gigabit MagJack® with PoEp	PART NO. / DRAWING NO. 0838-1X1T-W7		STANDARD DIM. TOL. IN INCH		[ ] METRIC DIM. AS REFERENCE		bel COMPONENTS FOR A CONNECTED PLANET
	DATE 06-29-06		FILE NAME 08381X1TW7PC.DWG	.X		UNIT : INCH [mm]	REV. : PC		
DRAWN BY QIN				.XX		SCALE : N/A	SIZE : A4		
				.XXX	±0.004	⊕	⊖	PAGE : 5	