

LED1 POLARITY			LED2 POLARITY		
PIN 7	PIN 8	COLOR	PIN 9	PIN 10	COLOR
–	+	GREEN	–	+	GREEN



Turns Ratio	
TX	1CT : 1
RX	1CT : 1
OCL @ 100kHz/100mVRMS	
8mA DC BIAS	350μH MIN.
INS. LOSS	
1MHz TO 100MHz	-1.0 dB MAX
RET. LOSS (MIN)	
1MHz-30MHz	-18 dB
30MHz-60MHz	-18+20LOG(F/30MHz) dB
60MHz-80MHz	-12 dB
CROSS TALK (TX - RX)	
500kHz-1MHz	-70 dB MIN
10 MHz	-50 dB MIN
30 MHz	-45 dB MIN
50 MHz	-40 dB MIN
100 MHz	-35 dB MIN
CM TO CM REJ	
100kHz-1MHz	-70 dB MIN
10 MHz	-47 dB MIN
30 MHz	-42 dB MIN
60 MHz	-37 dB MIN
100 MHz	-30 dB MIN
CM TO DM REJ	
100kHz-1MHz	-70 dB MIN
10 MHz	-60 dB MIN
30 MHz	-50 dB MIN
60 MHz	-45 dB MIN
100 MHz	-40 dB MIN
HIPOT (Isolation Voltage):	1500 Vrms

V _F (FORWARD VOLTAGE)	IF=20mA	GREEN	2.2V TYP.
λ _D (DOMINANT WAVELENGTH)	IF=20mA	GREEN	565nm TYP.

INSULATION RESISTANCE: 1000 MEGΩ (MIN)
CONTACT RESISTANCE: 25 MILLIΩ (MAX)
DIELECTRIC WITHSTANDING: 750 VAC

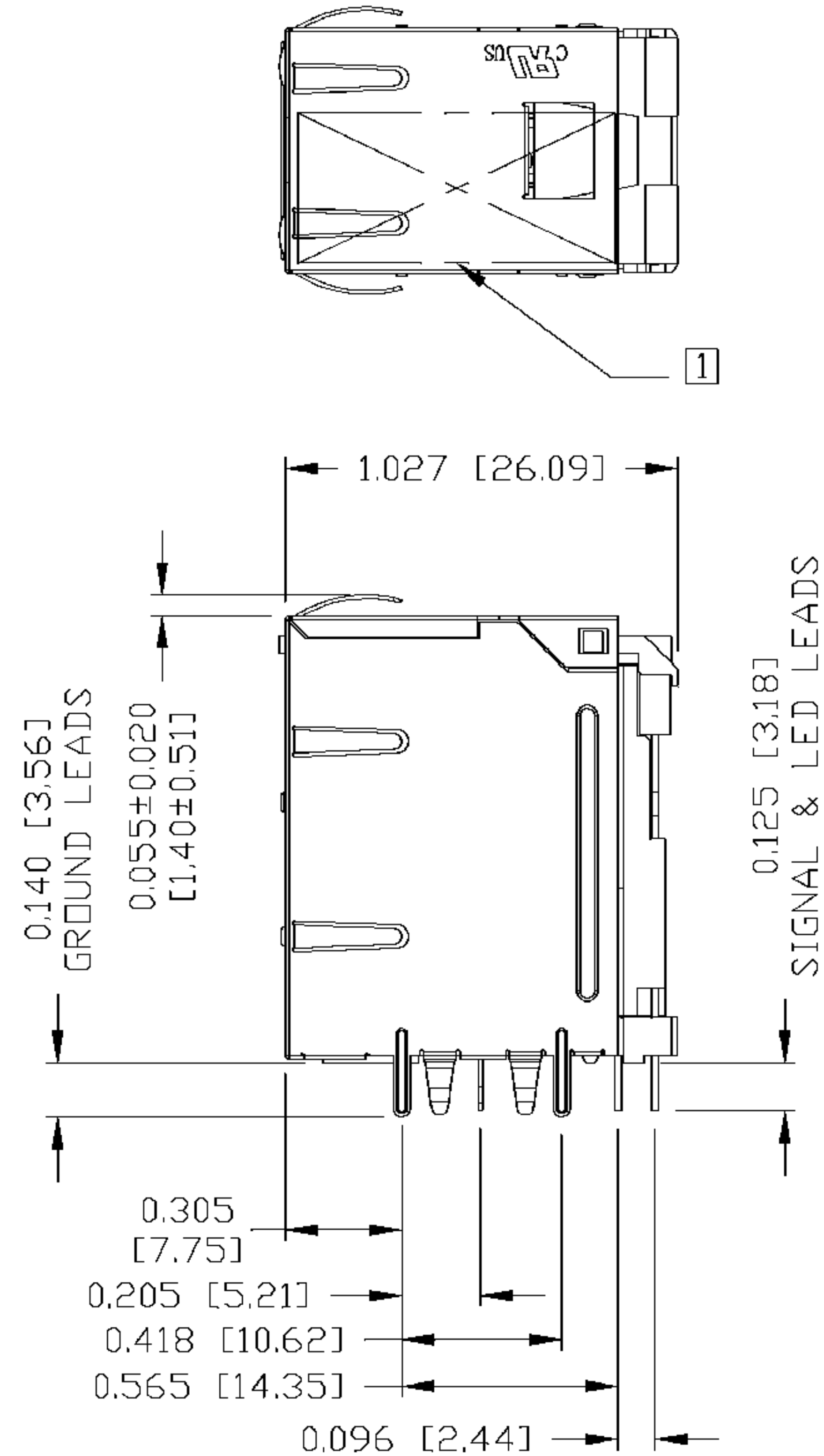
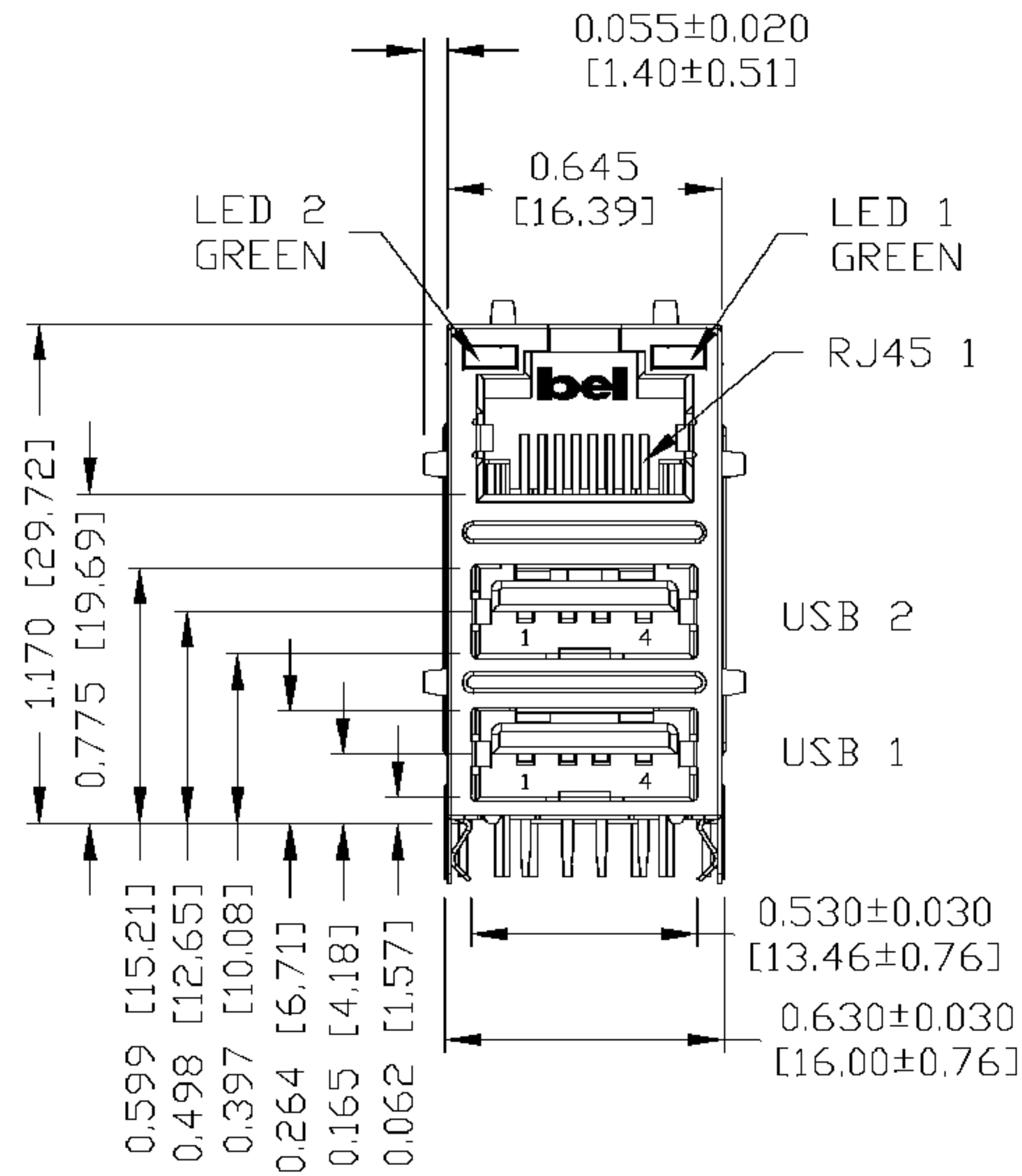
The schematic diagram illustrates the internal circuitry of a 10/100 Ethernet PHY. It features two green LEDs, LED1 and LED2, connected to pins 7 and 8, and pins 9 and 10 respectively. The main circuit consists of two 1CT:1 transformers for TX and RX paths, followed by four 75Ω termination resistors. A 1000pF 2KV capacitor is connected to the shield pin. The RJ45 connector pins are labeled 1 (TX+), 2 (TX-), 3 (RX+), 4, 5, 6 (RX-), 7, and 8.

ORIGINATED BY	DATE	TITLE MagJack® Combo (4 Cores, MDIX, CM TERMINATION)	PART NO. / DRAWING NO.	STANDARD DIM.		[] METRIC DIM. AS REFERENCE		 COMPONENTS FOR A CONNECTED PLANET
WCCHOW	08-14-07		08C2-1G1T-06	TOL. IN INCH		UNIT : INCH [mm] REV. : A		
DRAWN BY	DATE		FILE NAME	.X		SCALE : N/A	SIZE : A4	
WEIDE LEE	08-14-07	08C2-1G1T-06_A.DWG	.XX				PAGE : 2	
			.XXX					

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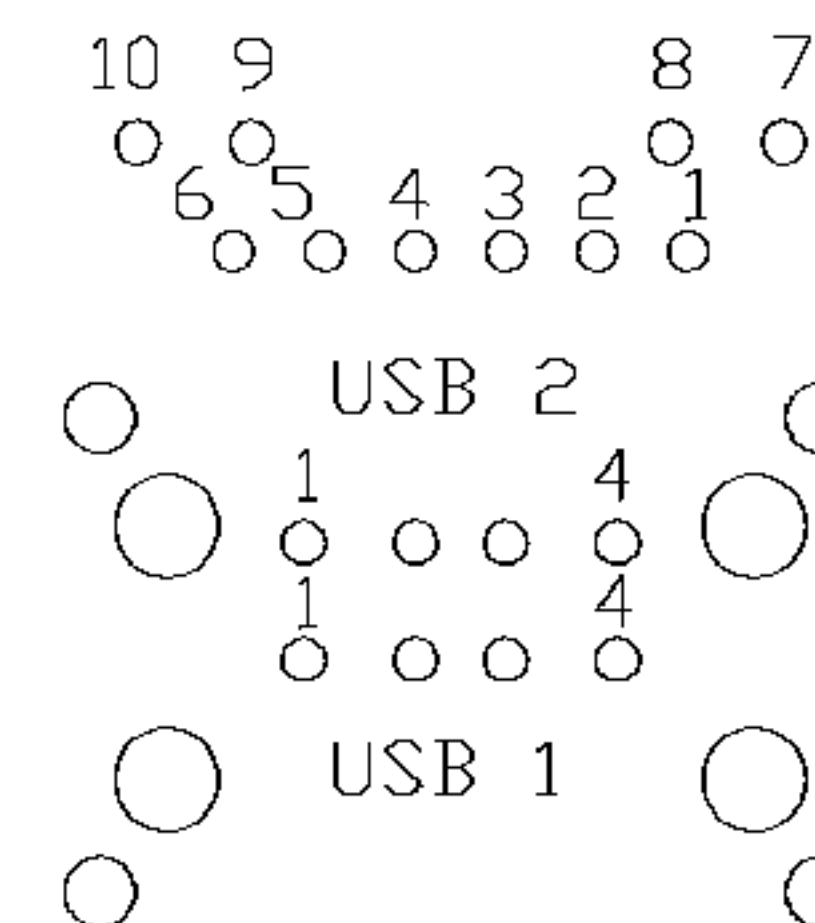
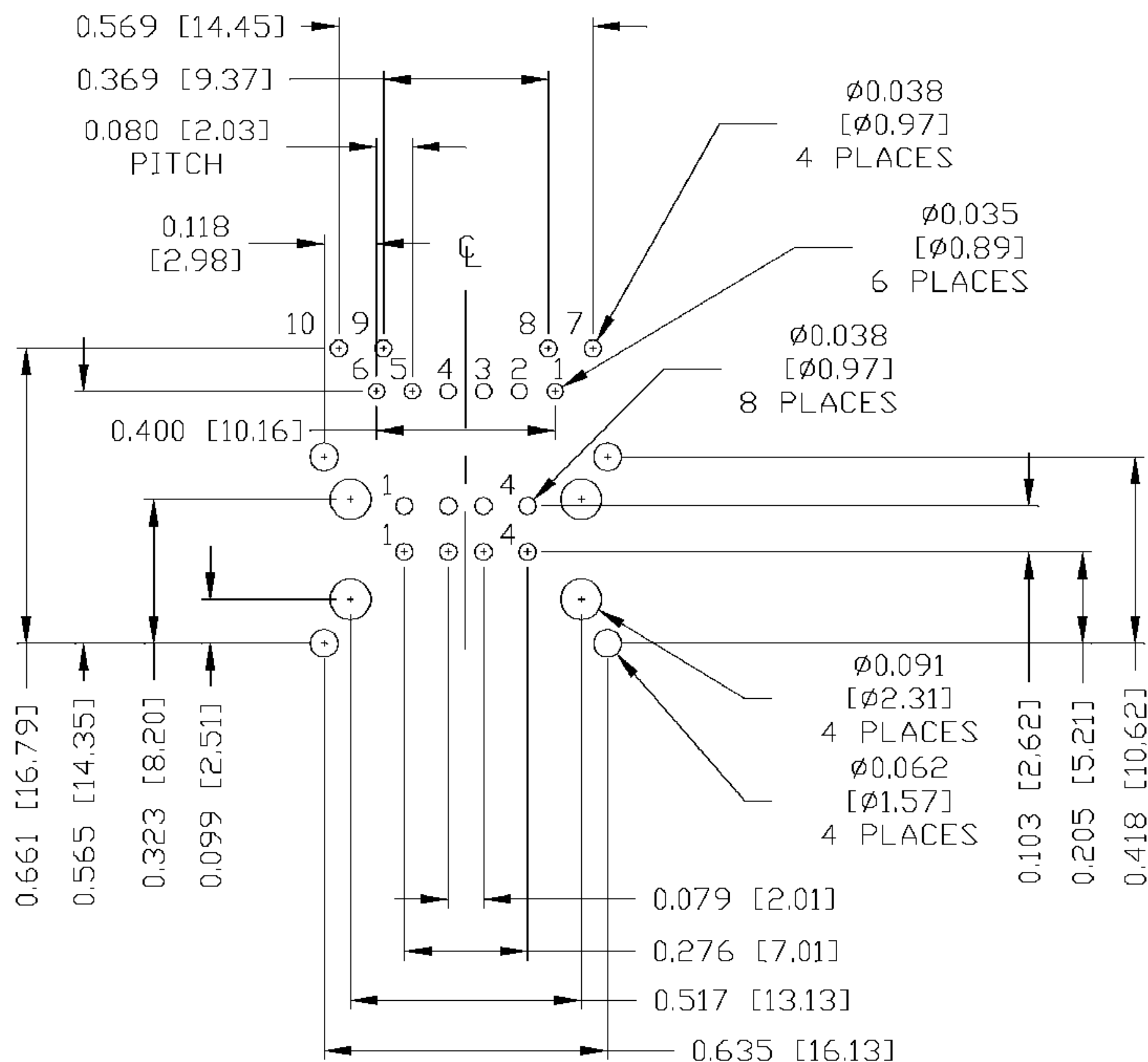
MECHANICAL SPECIFICATION

RoHS
2002/95/EC



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				TOL. IN INCH		UNIT : INCH [mm]	REV. : A
LIU QIN	08-14-07	MagJack® Combo (4 Cores, MDIX, CM TERMINATION)	08C2-1G1T-06	.X		SCALE : N/A	SIZE : A4
DRAWN BY	DATE			.XX			PAGE : 3
CHEN TING	08-14-07			.XXX	± 0.010		

Recommended PCB footprint
Component Side



RJ45 MECHANICAL:
PLASTIC HOUSING: THERMOPLASTIC PBT OR EQUIVALENT.
FLAMMABILITY RATING UL 94V-0
CONTACT PLATING: 30 MICRO-INCH HARD GOLD PLATING
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: PHOSPHOR BRONZE
30 MICRO-INCH GOLD PLATING ON CONTACT
AREA AND TIN ON SOLDER TAIL.

UL US UL RECOGNIZED - FILE #E196366 AND E169987.

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

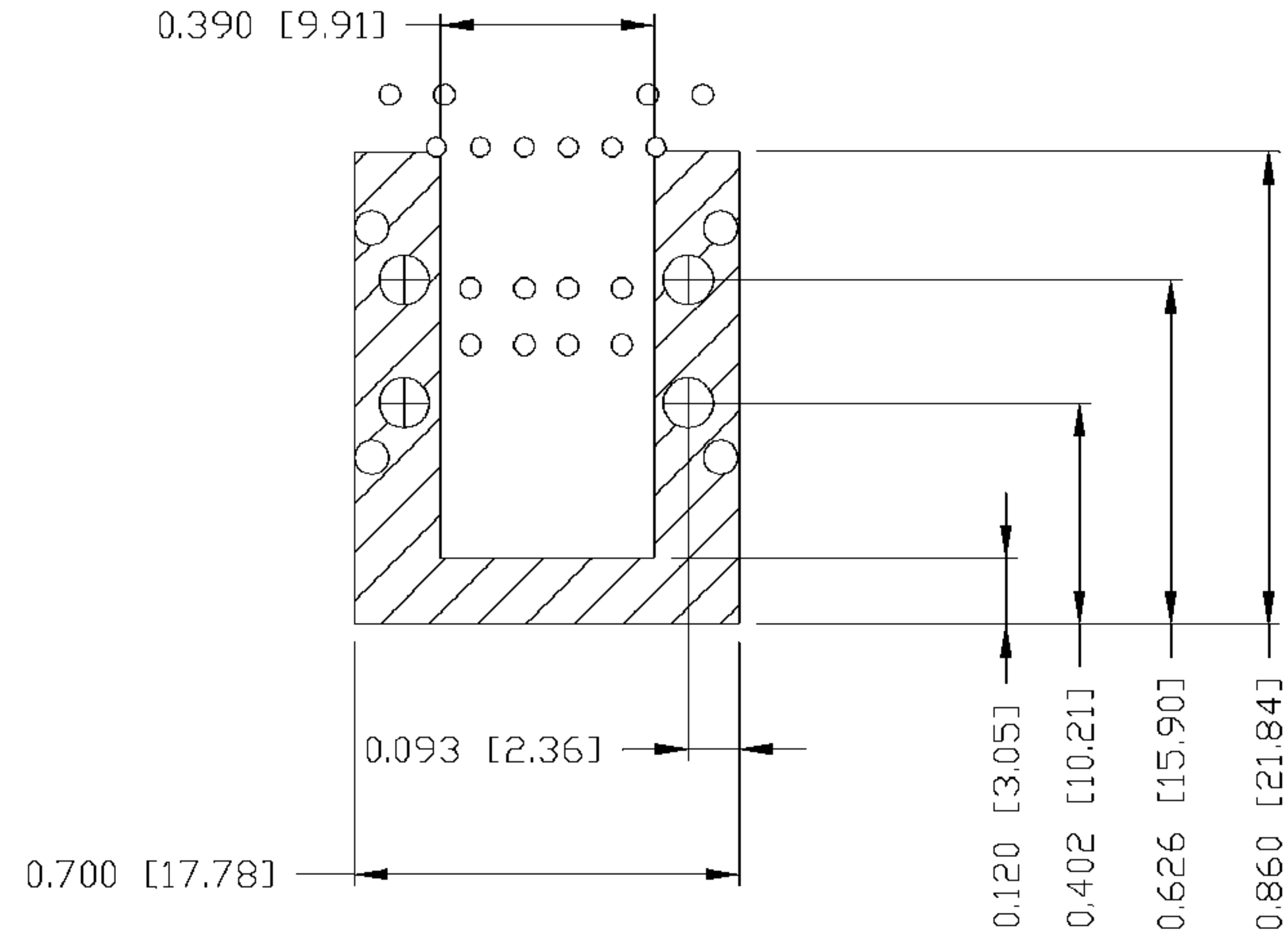
2. RoHS COMPLIANCE, PER EU DIRECTIVE 2002/95/EC.

JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS.

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DRAWN BY	DATE		FILE NAME	.X	SCALE : N/A	SIZE : A4
CHEN TING	08-14-07		08C2-1G1T-06_A.DWG	.XX		PAGE : 4
				.XXX	±0.004	

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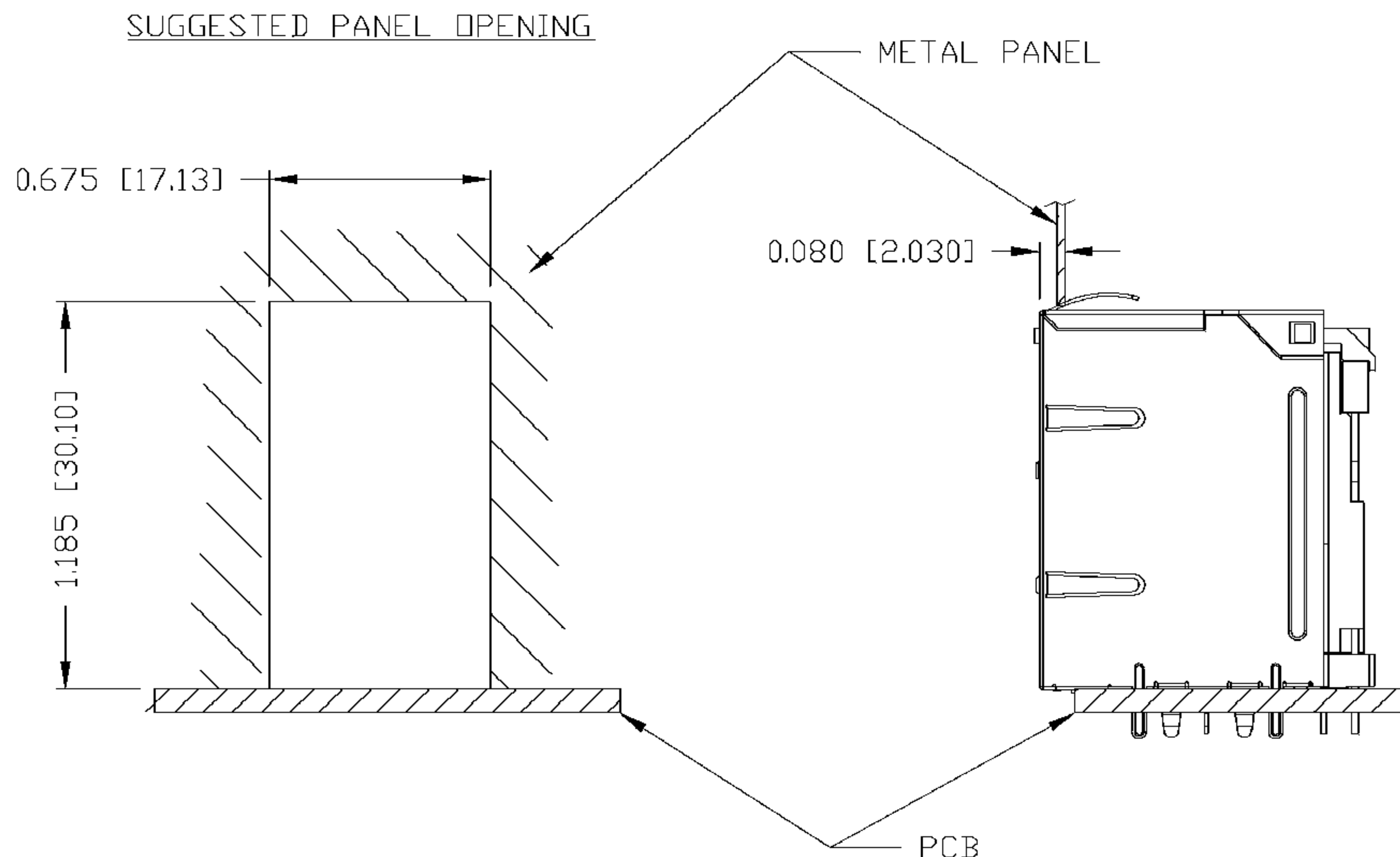
RoHS
2002/95/EC



NOTES

THE SHADED AREA ON THE CUSTOMER BOARD ARE
RECOMMENDED TO BE CLEAR OFF ANY VIA HOLE OR
COMPONENT PAD.

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CHEN TING	08-14-07		08C2-1G1T-06_A.DWG	.XX		PAGE : 5	
				.XXX	±0.004		



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-A3

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	DATE	TITLE	PART NO. / DRAWING NO.	STANDARD DIM. TOL. IN INCH	[] METRIC DIM. AS REFERENCE	
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CHEN TING	08-14-07		08C2-1G1T-06_A.DWG	.XXX ±0.005	⊕ — □	PAGE : 6

