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LED 1 POLARITY			LED 2 POLARITY		
PIN 22	PIN 21	COLOR	PIN 20	PIN 19	COLOR
-	+	YELLOW	+	-	ORANGE
			-	+	GREEN

PRELIMINARY



**ELECTRICAL CHARACTERISTICS @ 25°C**

**TURNS 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**

100kHz 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 or 2250VDC

**LED 1**

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

**LED 2**

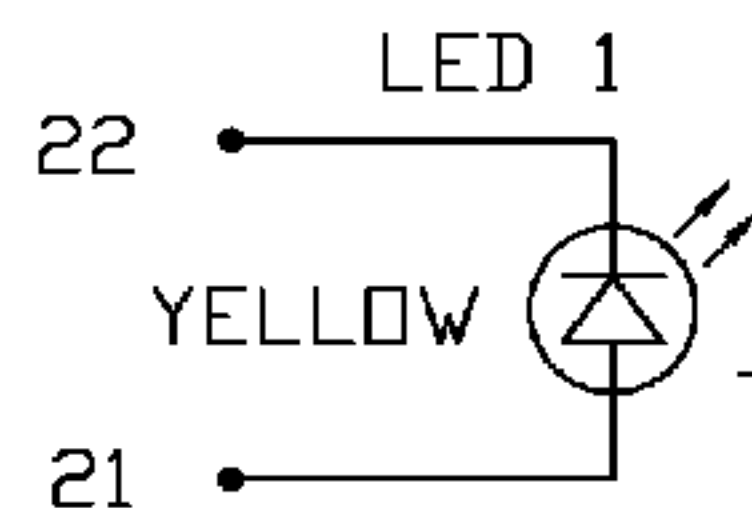
VF (FORWARD VOLTAGE)	IF=20mA	GREEN	2.2V TYP.
		ORANGE	2.0V TYP.
λD (DOMINANT WAVELENGTH)	IF=20mA	GREEN	565nm TYP.
		ORANGE	610nm TYP.

**USB ELECTRICAL:**

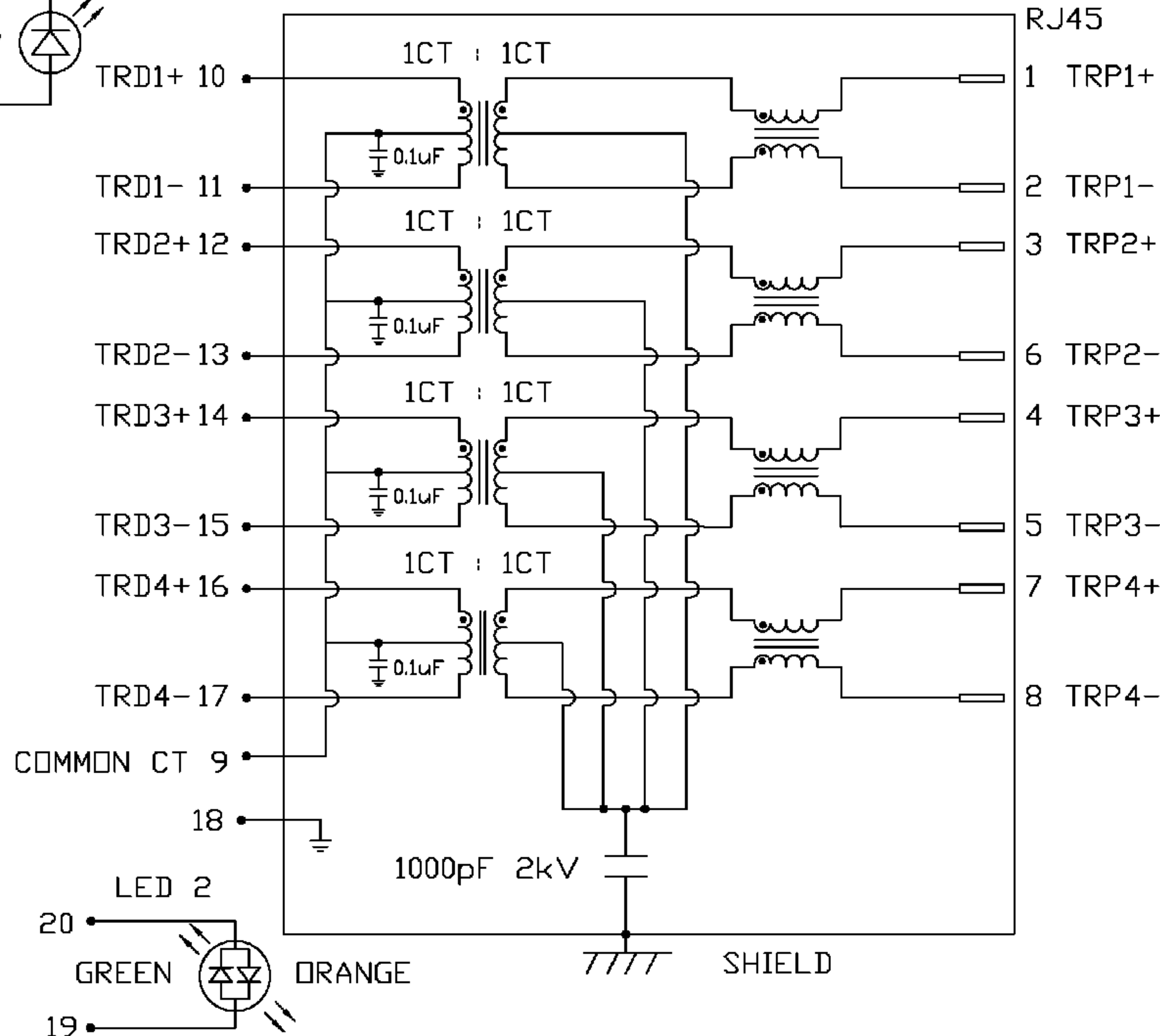
INSULATION RESISTANCE: 1000 MEGA Ω (MIN)

CONTACT RESISTANCE: 25 MILLI Ω (MAX)

DIELECTRIC WITHSTANDING: 750 VAC



**SCHEMATIC**



<b>ORIGINATED BY</b> CHUNG	<b>DATE</b> 04-17-06	<b>TITLE</b> gigabit MagJack® Combo (Staggered pin, 8 cores)	<b>PART NO. / DRAWING NO.</b> C893-1XX1-E3	<b>STANDARD DIM.</b> TOL. IN INCH	<b>[ ] METRIC DIM. AS REFERENCE</b>		<b>bel</b> COMPONENTS FOR A CONNECTED PLANET
<b>DRAWN BY</b> DE	<b>DATE</b> 04-17-06		<b>FILE NAME</b> C8931XX1E3PC.DWG	.X .XX .XXX	UNIT : INCH [mm] SCALE : N/A	REV. : PC SIZE : A4 PAGE : 2	

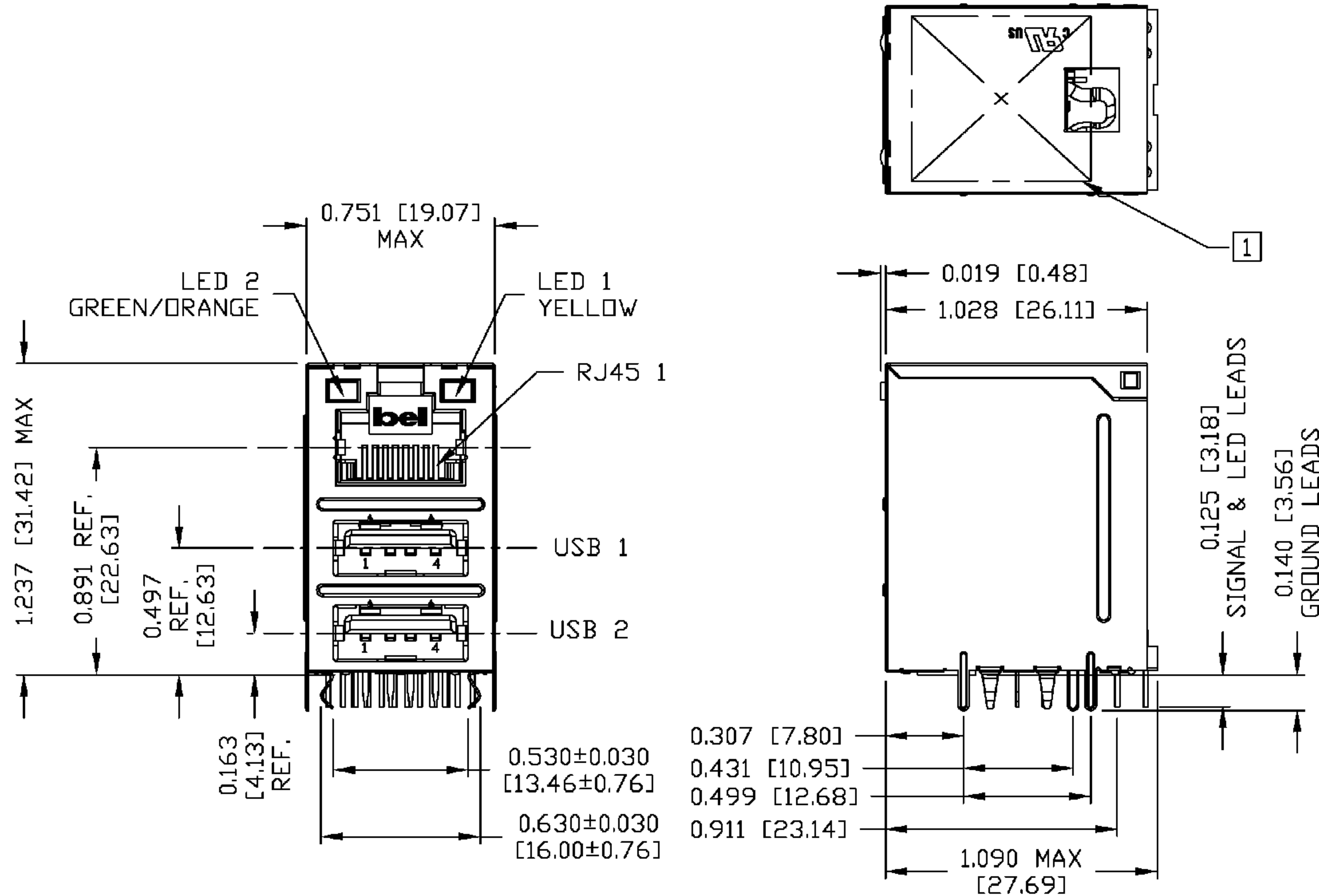
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RoHS  
2002/95/EC



MECHANICAL SPECIFICATION

PRELIMINARY



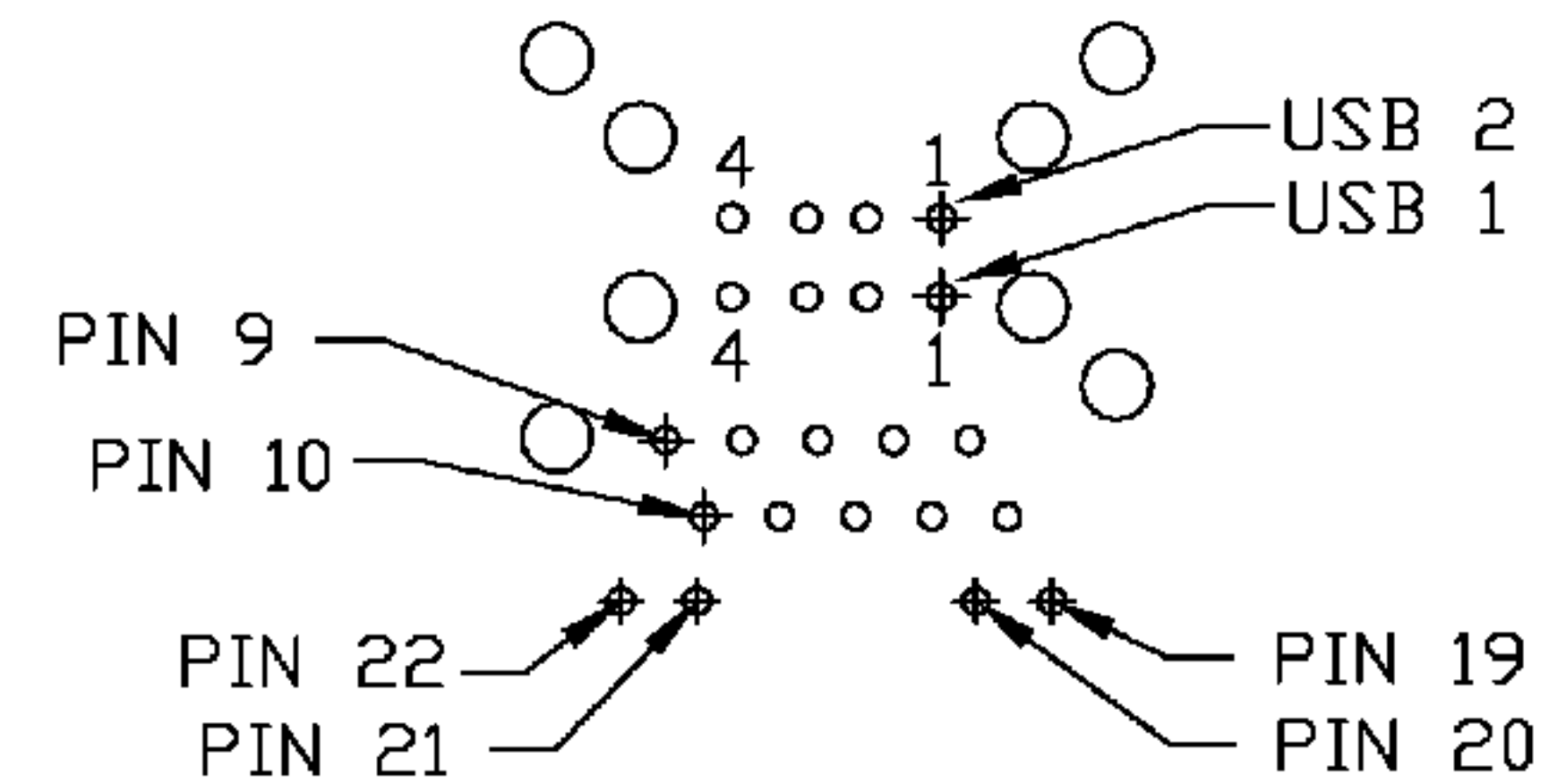
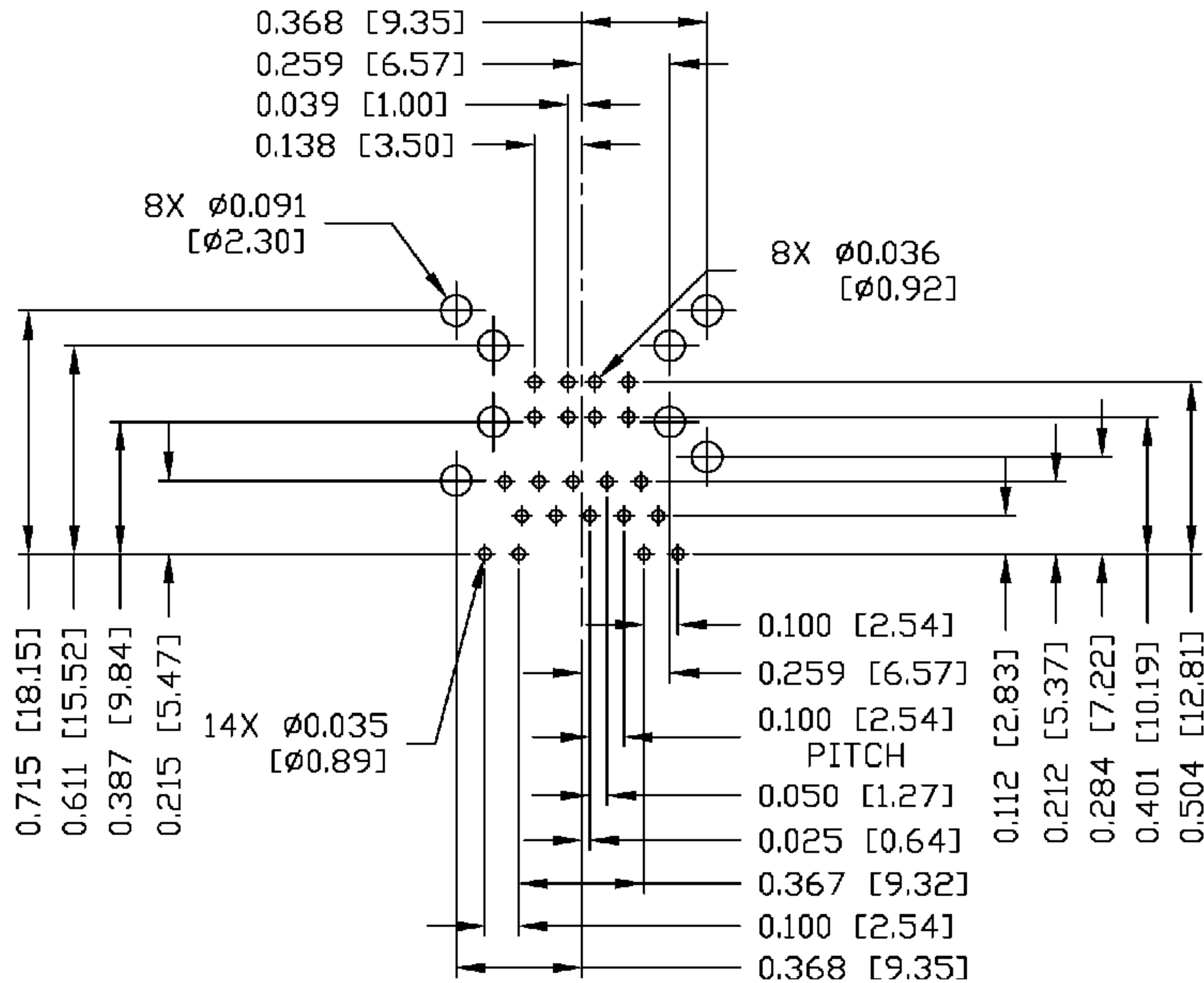
ORIGINATED BY	DATE	TITLE	PART NO. / DRAWING NO.	STANDARD DIM.	[ ] METRIC DIM. AS REFERENCE	<p>COMPONENTS OF A CONNECTED PLANET</p>
QIN	04-17-06	gigabit MagJack® Combo (Staggered pin, 8 cores)	C893-1XX1-E3	TOL. IN INCH	UNIT : INCH [mm] REV. : PC	
DRAWN BY	DATE		FILE NAME	.X	SCALE : N/A SIZE : A4	
TING	04-17-06		C8931XX1E3PC.DWG	.XX		
				.XXX ±0.010	PAGE : 3	

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PRELIMINARY

Recommended PCB footprint  
Component Side



RJ45 MECHANICAL:

PLASTIC HOUSING: THERMOPLASTIC PBT  
 FLAMMABILITY RATING UL 94V-0  
 CONTACTS PLATING: 50 MICRO-INCH HARD GOLD PLATING  
 PINS: TIN-COATED CP WIRE, DIA 0.018 INCH.  
 METAL SHIELD: PRE-PLATED NICKEL 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.

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

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

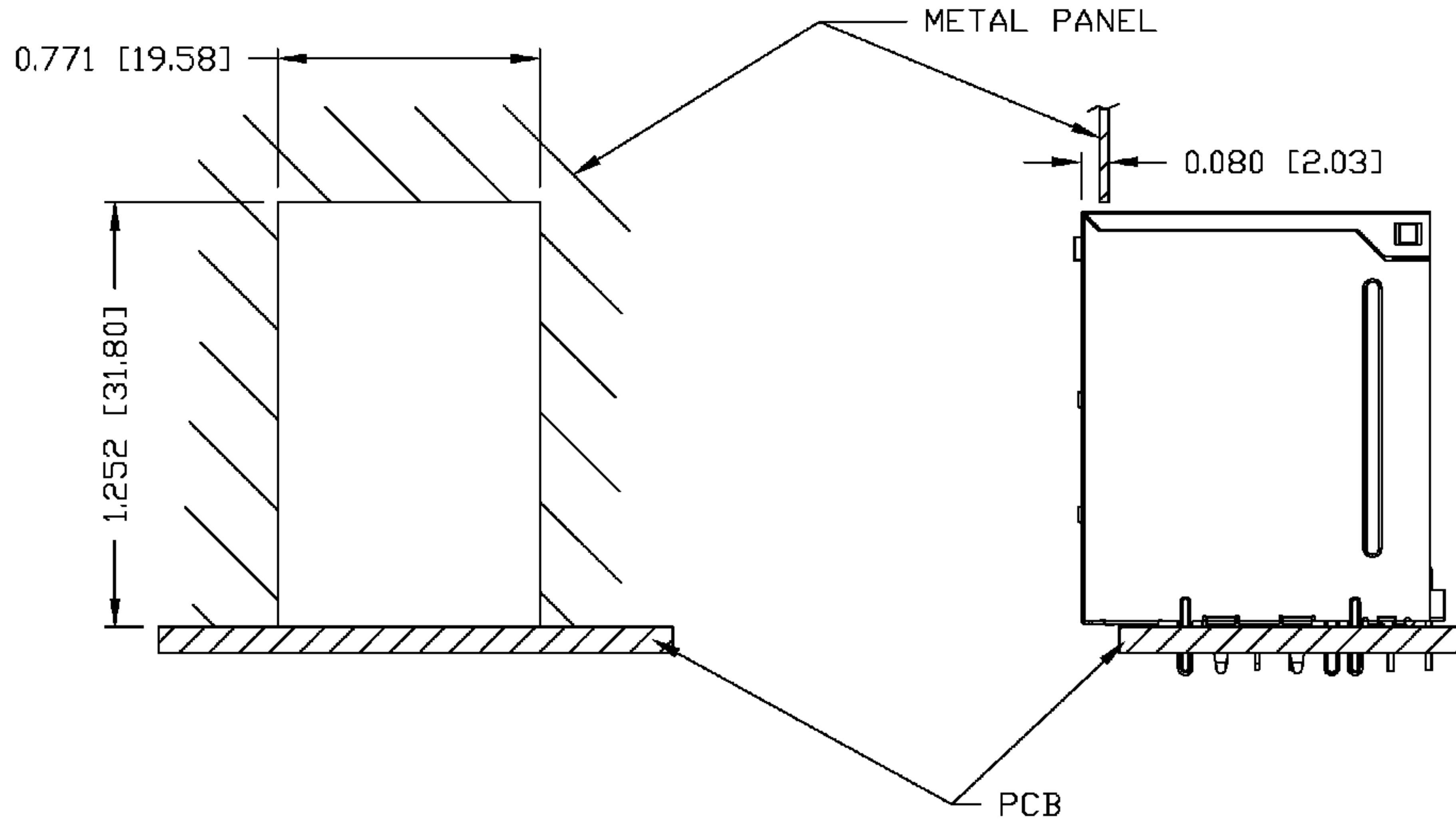
ORIGINATED BY QIN	DATE 04-17-06	TITLE gigabit MagJack® Combo (Staggered pin, 8 cores)	PART NO. / DRAWING NO. C893-1XX1-E3	STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REFERENCE	
DRAWN BY TING	DATE 04-17-06		FILE NAME C8931XX1E3PC.DWG	.X .XX .XXX ±0.004	UNIT : INCH [mm] SCALE : N/A	REV. : PC SIZE : A4 PAGE : 4



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SUGGESTED PANEL OPENING

PRELIMINARY



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-H3 (TOP)  
0200-9999-H4 (BOTTOM)

PACKING QUANTITY : 35 PCS FINISHED GOODS PER TRAY  
9 TRAYS (315 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.		[ ] METRIC DIM. AS REFERENCE	
				TOL. IN INCH		UNIT : INCH [mm]	REV. : PC
QIN	04-17-06	gigabit MagJack® Combo (Staggered pin, 8 cores)	C893-1XX1-E3	.X		SCALE : N/A	SIZE : A4
DRAWN BY	DATE		FILE NAME	.XX			PAGE : 5
TING	04-17-06		C8931XX1E3PC.DWG	.XXX	±0.004		

