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PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:  
5736910 5939955 6425781 6428361 6554638 6840817 7123117  
7429195 7717749 7808751 6217391 6149050 7924130

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
1		INITIAL RELEASE	19JAN2018	TRY	TY
2		SEE LAST SHEET	25JAN2018	TRY	TY

WITH EMI FINGER

1. MATERIALS

USB MATERIALS:  
HOUSING: THERMOPLASTIC, BLUE, FLAMMABILITY RATING UL 94V-0  
USB 3.1 CONTACT TYPE 1: PHOSPHOR BRONZE, WITH 1.27um MIN OVERALL NICKEL UNDERPLATE AND SELECTIVE 0.762um MIN GOLD PLATING AT MATING INTERFACE  
USB 3.1 CONTACT TYPE 2: COPPER BASE ALLOY, WITH 1.27um MIN OVERALL NICKEL UNDERPLATE AND SELECTIVE 0.762um MIN GOLD PLATING AT MATING INTERFACE

RJ45 MATERIALS:  
HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATING UL 94V-0  
SHIELD: STAINLESS STEEL, PREPLATED WITH MIN 0.76um SEMI-BRIGHT NICKEL, POST DIPPED WITH 2.54um MIN SOLDER ON SOLDER TAILS  
CONTACT: PHOSPHOR BRONZE, WITH 1.27um MIN OVERALL NICKEL UNDERPLATE AND SELECTIVE 1.27um MIN GOLD PLATING AT MATING INTERFACE

LED MATERIALS:  
DIFFUSED EPOXY LENS, CARBON STEEL LEAD FRAME LEADS, PREPLATED WITH 2.03um MIN SILVER OVER 1.02 MIN NICKEL OVER 1.02um MIN COPPER UNDERPLATE, POST PLATED WITH 2.54um MIN MATTE TIN AND/OR 2.54um MIN SAC SOLDER DIP OR PURE TIN SOLDER DIP.

2. MAGNETICS  
-APPLICATION : 2.5G BASE-T  
-IMPEDANCE: 100 OHMS  
-TURNS RATIO(CHIP:CABLE): 1:1 ALL FOUR PAIRS  
-OPEN CIRCUIT INDUCTANCE(OCL): 180uH MIN @100kHz, 0.1 VRMS, 8mADC BIAS FROM 0°C TO 70°C, ALL FOUR PAIRS  
-ALL FOUR PAIRS BI-DIRECTIONAL  
-PERFORMANCE @ 25°C:  
TX AND RX RETURN LOSS (RL):  
20dB MIN FROM 1MHz TO 40MHz  
20-15LOG(f/40)dB MIN FROM 40MHz TO 150MHz  
-ISOLATION VOLTAGE:2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC.

3. THE MAGNETIC CIRCUIT ON ALL FOUR CHANNELS IS SYMMETRICAL AND SUPPORTS AUTO-MDIX OPERATION.

4. OPERATING TEMPERATURE: 0°C - 70°C.

5. DATUM Y AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.

6. RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.

7. TRP CONNECTOR LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN, AGENCY APPROVAL MARKING IN APPROPRIATE LOCATION SHOWN.  
DATE CODE: YYWW WHERE "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK, WITH SUNDAY= 1

8. LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA  
LED COLOR: DOMINANT WAVELENGTH (λD)  
GREEN 568 nm TYP at IF=20mA; YELLOW, 588nm TYP AT IF=20mA;  
FORWARD VOLTAGE (VF):  
GREEN 2.2V TYP at IF=20mA; YELLOW, 2.1V TYP AT IF=20mA;

9. THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 260°C MAX, 10 SECONDS MAX.

10. LOW HALOGEN SPEC(EXCEPT LIGHT PIPE):  
CHLORINE (Cl) 900PPM MAX  
BROMINE (Br) 900PPM MAX  
TOTAL BROMINE AND CHLORINE (Br+Cl) 1500PPM MAX  
LIGHT PIPE COMPLY WITH LOW HALOGEN SPECIFICATION "DIN VDE 0472"  
CHLORINE (Cl) 1000PPM MAX  
BROMINE (Br) 1000PPM MAX  
TOTAL BROMINE AND CHLORINE (Br+Cl) 2000PPM MAX

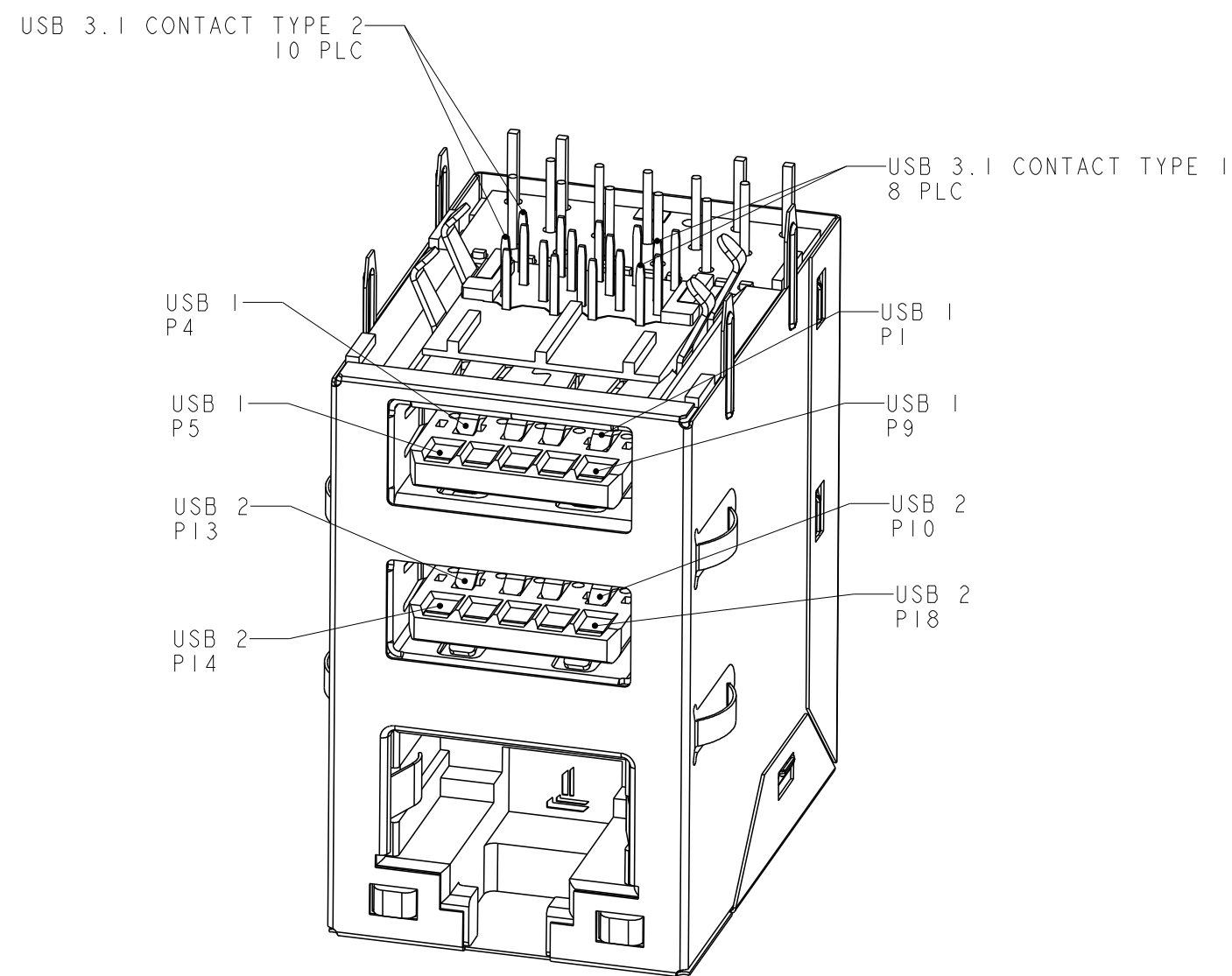
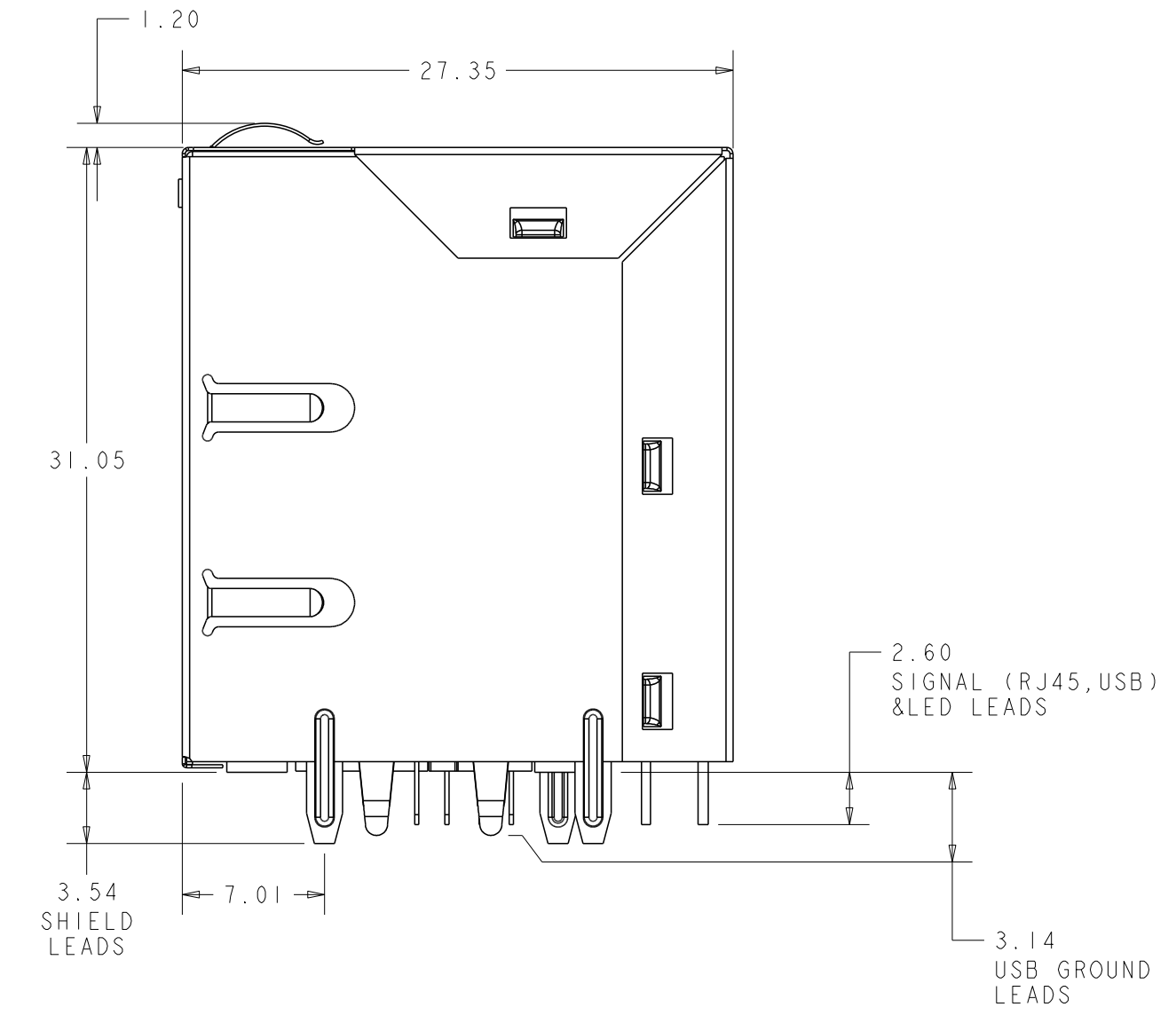
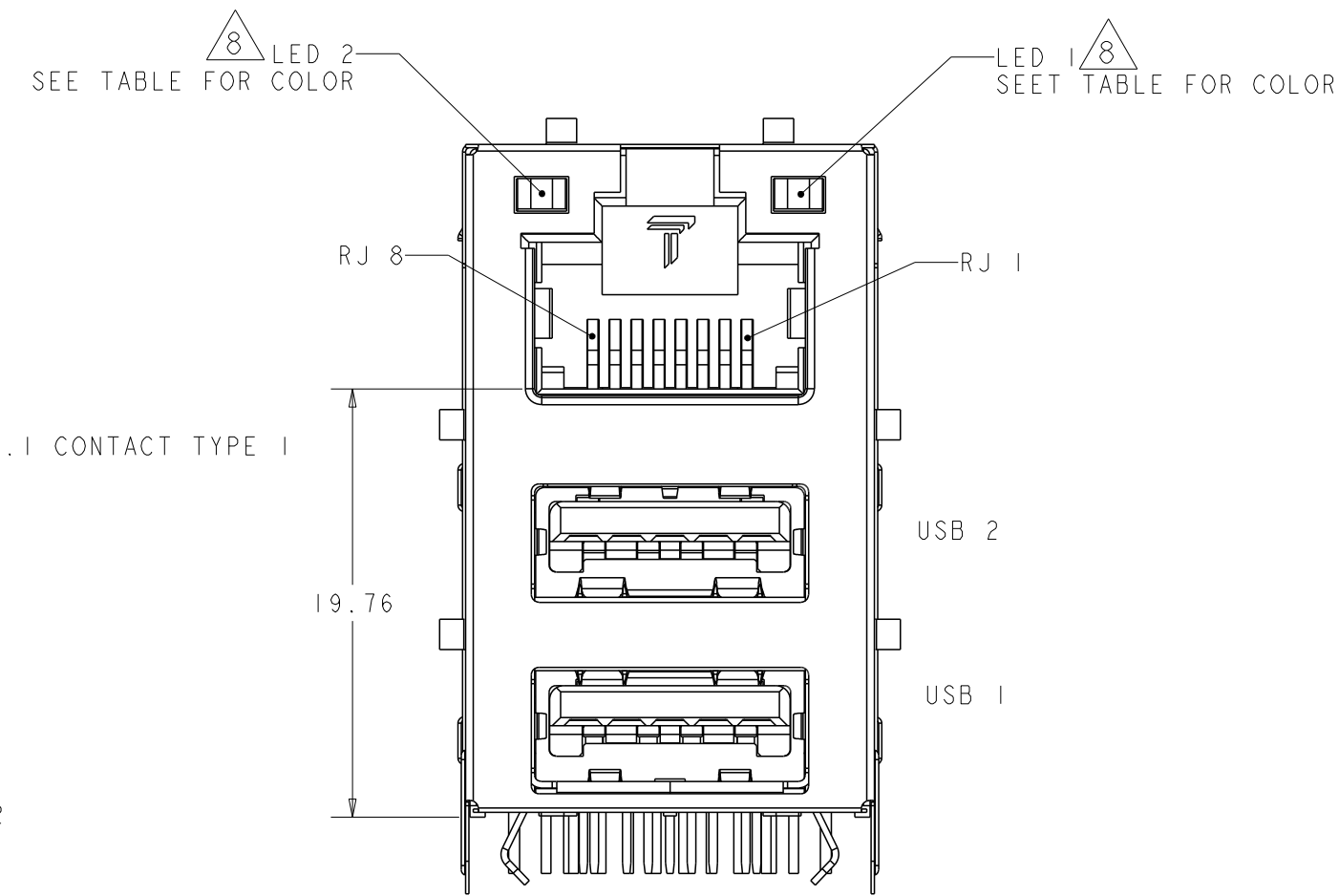
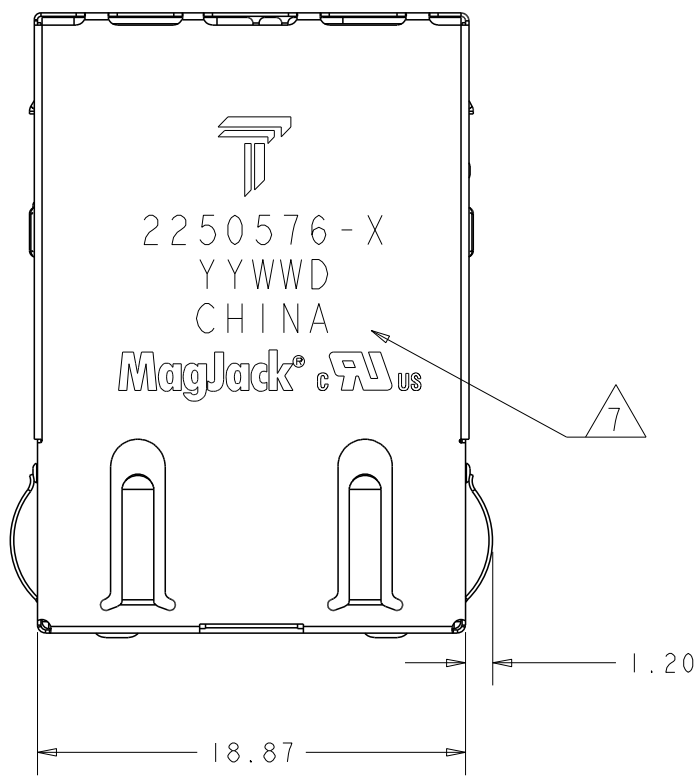
URQT01 2.5G CIRCUIT


C1: 1000pF, 2kV, CAPACITOR;  
C2-C5: 100nF, 50V, CAPACITORS;  
R1-R4: 750hms, 1/16W, RESISTORS

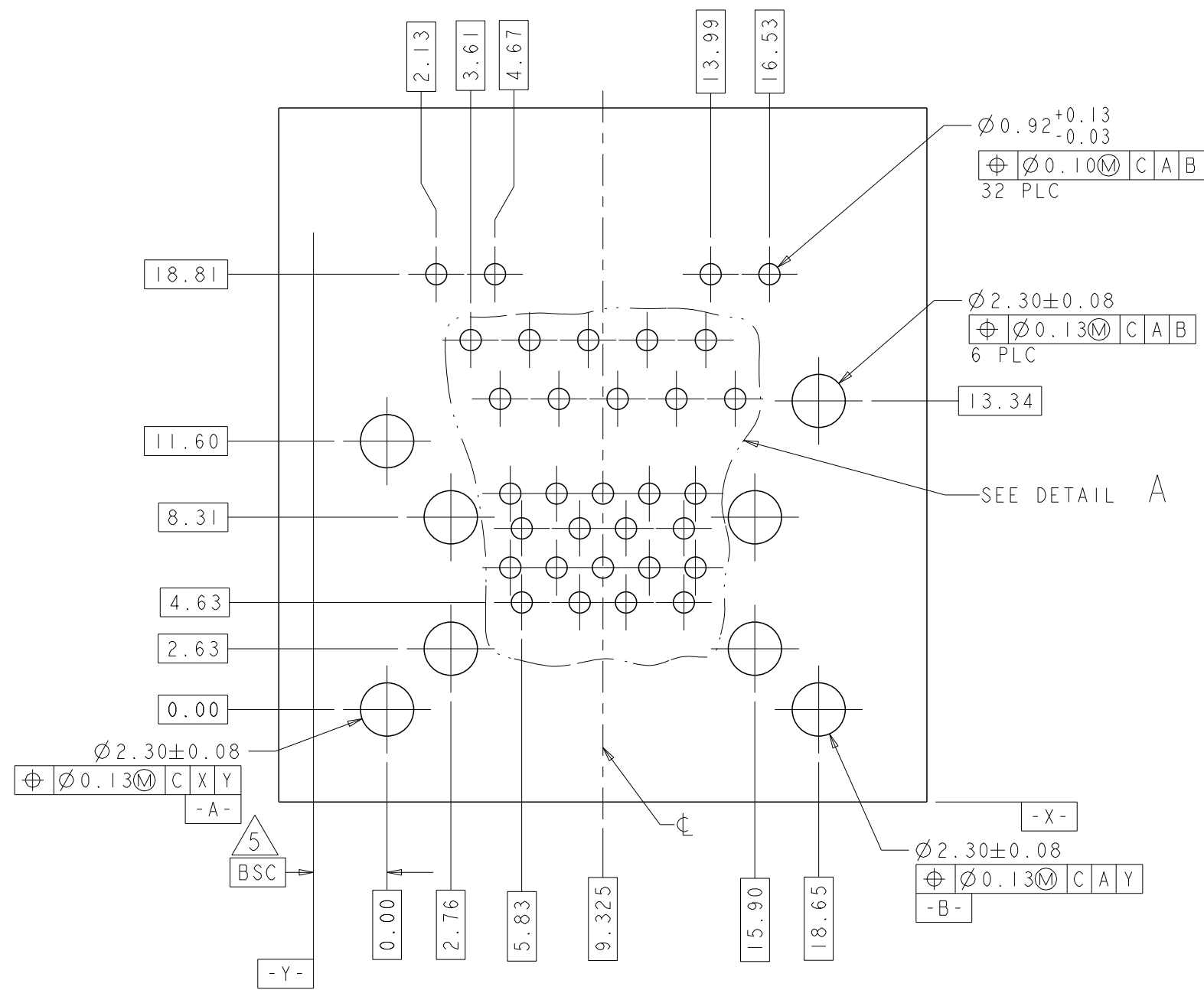
GREEN/YELLOW	GREEN	2250576-1
LED2	LED1	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT, AND COMPLIANT TO ASME Y14.5M		DWN TOWER YU / YI LIU 19JAN2018	 DONGGUAN CHINA	
DIMENSIONS: mm		CHK BILL LIU 19JAN2018		
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ±		APVD TONY YUAN 19JAN2018	DESC MAGJACK OVER DUAL USB3.1 URQT01 CIRCUIT, 2.5G, W/ LEDS	
PRODUCT SPEC 108-104004		MODEL NAME MAGJACK OVER USB NON-PoE	SIZE A2	DRAWING NO C-2250576
CUSTOMER DRAWING			SCALE 3:1	SHEET 1 OF 5
			RESTRICTED TO -	REV 2

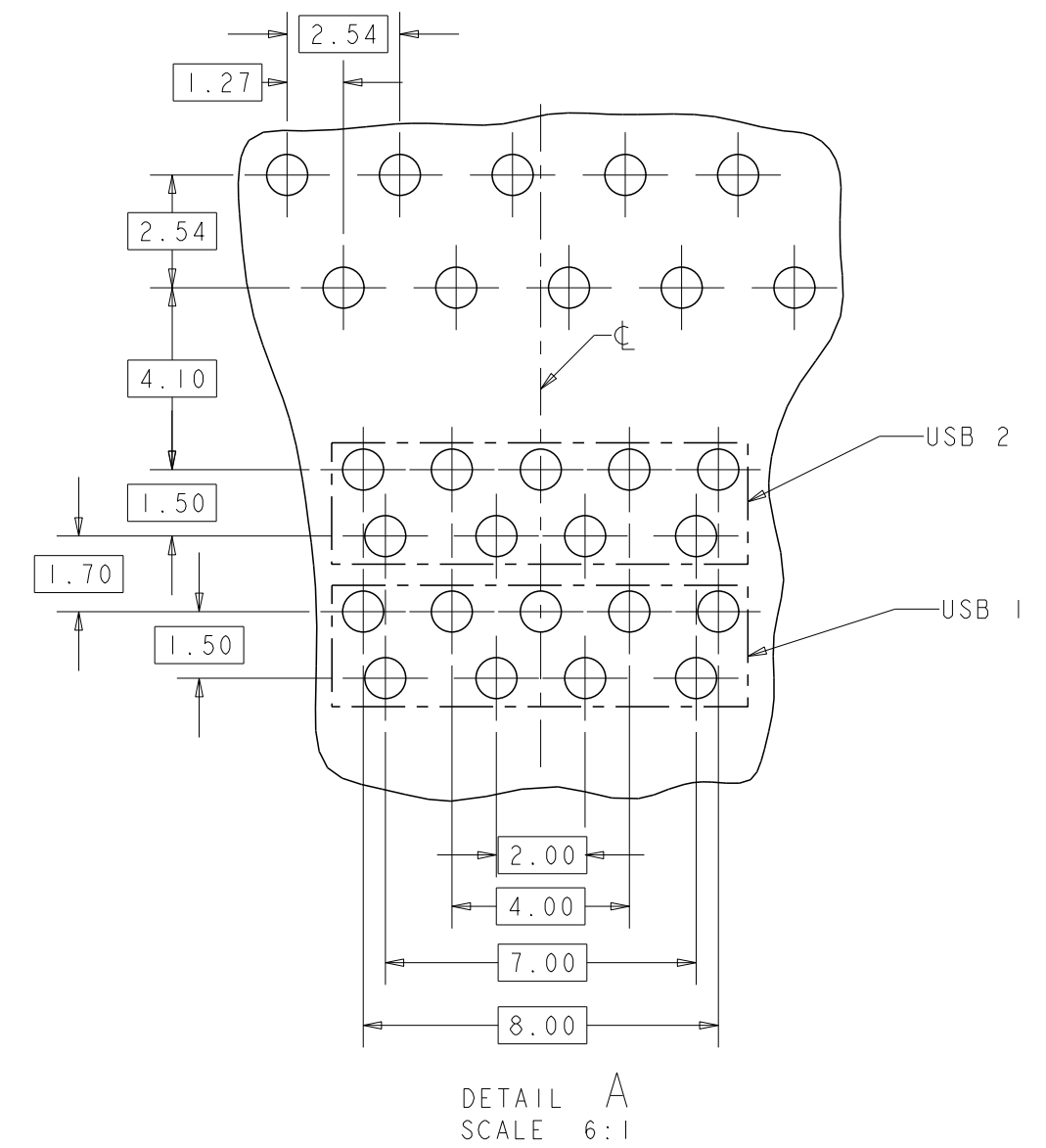
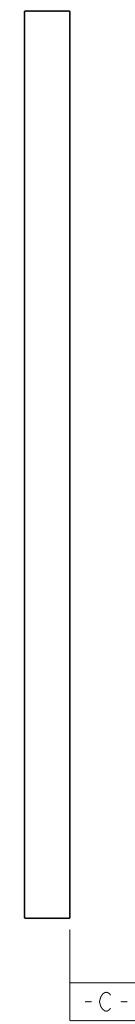
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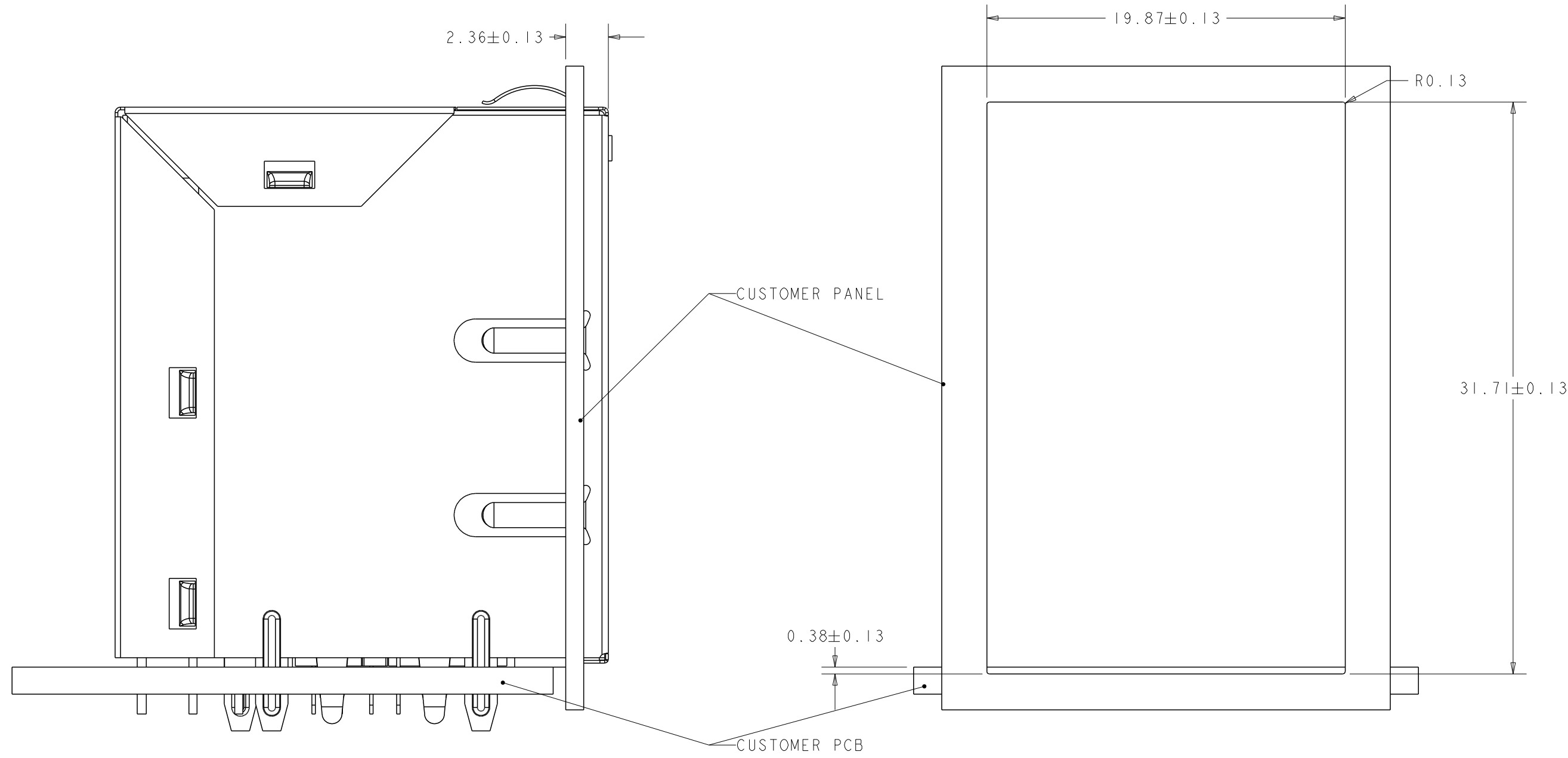
THIS DRAWING IS A CONTROLLED DOCUMENT. AND COMPLIANT TO ASME Y14.5M		DWN TOWER YU / YI LIU 19 JAN 2018	 <b>trp</b> CONNECTOR a bel group	DONGGUAN CHINA	
DIMENSIONS: mm		CHK BILL LIU 19 JAN 2018		DESC MAGJACK OVER DUAL USB3.1 URQTO1 CIRCUIT, 2.5G, W/ LEDS	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD TONY YUAN 19 JAN 2018	SIZE A2		RESTRICTED TO -
0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ± APPLICATION SPEC		MODEL NAME MAGJACK OVER USB NON-PoE	DRAWING NO C-2250576		SCALE 3:1
PRODUCT SPEC 108-104004		CUSTOMER DRAWING		SHEET 2	OF 5 REV 2



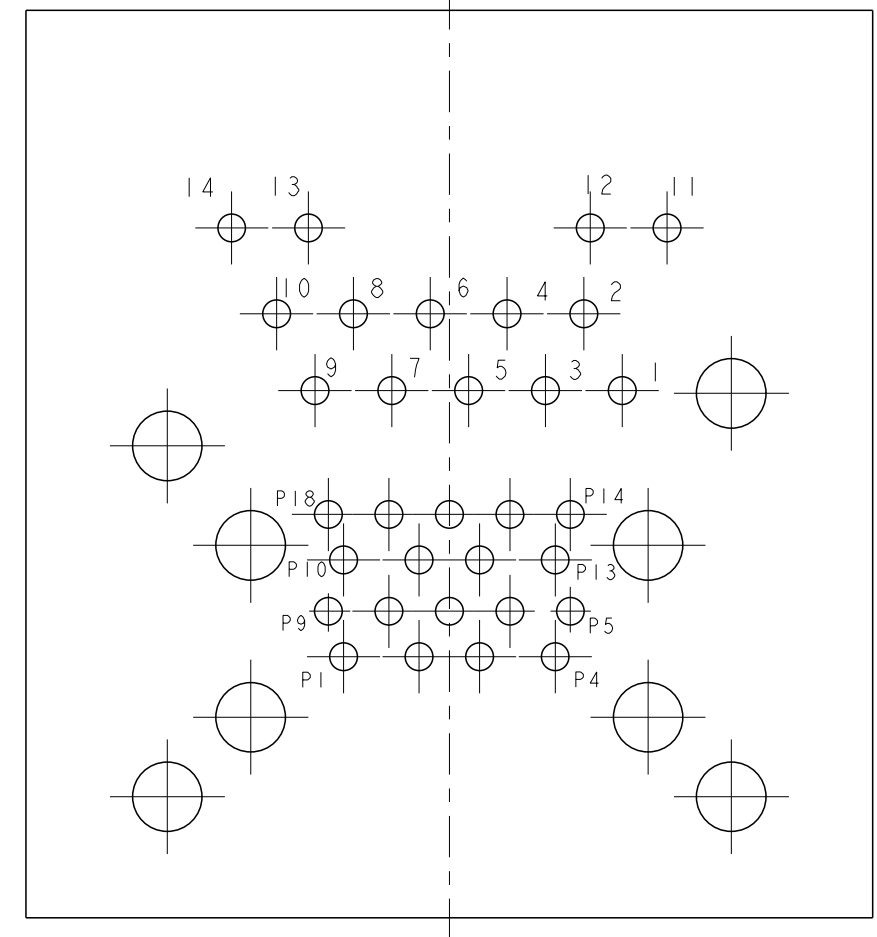
RECOMMENDED PC BOARD LAYOUT (VIEW FROM COMPONENT SIDE)



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DIMENSIONS: mm		CHK BILL LIU 19 JAN 2018		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD TONY YUAN 19 JAN 2018	DESC MAGJACK OVER DUAL USB3.1 URQT01 CIRCUIT, 2.5G, W/ LEDS	
0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ± APPLICATION SPEC		MODEL NAME MAGJACK OVER USB NON-POE	SIZE A2	RESTRICTED TO -
PRODUCT SPEC 108-104004		DRAWING NO C-2250576		SCALE 3:1
CUSTOMER DRAWING			SHEET 3 OF 5	REV 2



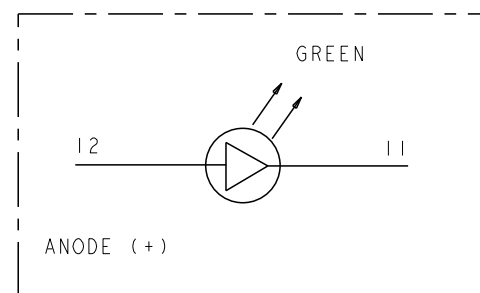
SUGGEST CUSTOMER CUTOUT DIMENSIONS



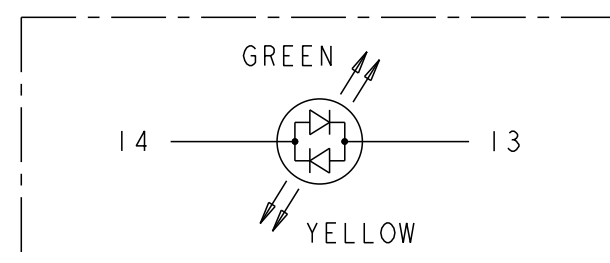
USB 3.1 STANDARD-A CONNECTOR PIN ASSIGNMENTS

PIN NUMBER	SIGNAL NAME	DESCRIPTION
P1 & P10	VBUS	POWER
P2 & P11	D-	USB 2.0 DIFFERENTIAL PAIR
P3 & P12	D+	
P4 & P13	GND	
P5 & P14	STDA_SSRX-	SUPERSPEED RECEIVER DIFFERENTIAL PAIR
P6 & P15	STDA_SSRX+	
P7 & P16	GND_DRAIN	GROUND FOR SIGNAL RETURN
P8 & P17	STDA_SSTX-	SUPERSPEED TRANSMITTER DIFFERENTIAL PAIR
P9 & P18	STDA_SSTX+	

SINGLE COLOR LED


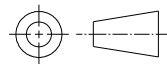


BI-COLOR LED



THIS DRAWING IS A CONTROLLED DOCUMENT, AND COMPLIANT TO ASME Y14.5M		DWN 19JAN2018 TOWER YU / YI LIU		 <b>trp</b> CONNECTOR a bel group DONGGUAN CHINA
DIMENSIONS: mm		CHK 19JAN2018 BILL LIU		
		TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD 19JAN2018 TONY YUAN MODEL NAME <b>MAGJACK OVER USB NON-POE</b>
PRODUCT SPEC 108-104004		0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ± APPLICATION SPEC -		
		DESC MAGJACK OVER DUAL USB3.1 URQT01 CIRCUIT, 2.5G, W/ LEDS		RESTRICTED TO
		SIZE A2 CAGE CODE DRAWING NO C-2250576		
		CUSTOMER DRAWING SCALE 3:1 SHEET 4 OF 5 REV 2		

2250576_C					STOCK DISPOSITION			
					A: CONTINUE AS IS		D: USE OLD FIRST	
					B: REWORK		E: PARTS TO CONFORM	
					C: SCRAP		F: OTHER	
REVISION HISTORY								
DATE	REV	CHANGES	REASON	APPROVAL	INVENTORY (A,B,C,D,E,F)	WORK IN PROCESS (A,B,C,F)	SUPPLIER ORDERS (A,E,F)	OPEN CUST ORDERS (A,E,F)
19JAN2018	1	-	INITIAL RELEASE	TONY YUAN	-	-	-	-
25JAN2018	2	SHEET 1, CHANGE CIRCUIT FROM 3 WIRE CMC TO 2 WIRES CMC TITLE BLOCK AND NOTES: CHANGE USB3.0 TO USB3.1	DESIGN CHANGE	TONY YUAN				

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DIMENSIONS: mm		CHK BILL LIU 19JAN2018		DESC MAGJACK OVER DUAL USB3.1 URQT01 CIRCUIT, 2.5G, W/ LEDS	
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TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ±		SIZE A2		DRAWING NO C-2250576	SCALE 3:1
PRODUCT SPEC 108-104004		APPLICATION SPEC -		CUSTOMER DRAWING	SHEET 5 OF 5 REV 2