

P	LTR	DESCRIPTION	DATE	DWN	APVD
E		LOGO CHANGE	07APR2013	PP	KZ

**1. RJ45 MATERIALS**  
 HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATED UL 94V-0  
 SHIELD: BRASS, 0.2 mm THICK  
 PREPLATED WITH MIN 0.76  $\mu$ m SEMI-BRIGHT NICKEL  
 POST DIPPED WITH 2.54  $\mu$ m MIN SAC SOLDER AT GROUND PINS.  
 CONTACT: PHOSPHOR BRONZE, PLATED WITH 1.27  $\mu$ m MIN OVERALL NICKEL  
 UNDERPLATE, SELECTIVE 1.27  $\mu$ m MIN GOLD AT MATING INTERFACE AND 2.54  $\mu$ m  
 MIN MATTE TIN ON SOLDER TAILS. OR 1.27  $\mu$ m MIN NICKEL UNDERPLATE,  
 WITH 0.05  $\mu$ m GOLD PLATING OVER 0.76  $\mu$ m MIN PALLADIUM NICKEL PLATING AT  
 MATING INTERFACE AND 2.54  $\mu$ m MIN MATTE TIN ON SOLDER TAILS.  
 SOLDER TAIL: COPPER STEEL, PLATED WITH 2.54  $\mu$ m MIN MATTE TIN  
 LED: DIFFUSED EPOXY LENS, 0.5 mm SQUARE CARBON STEEL WIREFRAME  
 LEADS PREPLATED WITH 2.03  $\mu$ m MIN SILVER OVER 1.02  $\mu$ m MIN  
 NICKEL OVER 1.02  $\mu$ m MIN COPPER UNDERPLATE  
 POST PLATED WITH 2.54  $\mu$ m MIN MATTE TIN OR SAC TIN SOLDER DIP  
**USB MATERIALS:**  
 HOUSING: THERMOPLASTIC, FLAMMABILITY RATED UL94V-0  
 CONTACT: COPPER ALLOY WITH 0.76  $\mu$ m MIN GOLD PLATING OVER 1.27  $\mu$ m MIN  
 OVERALL NICKEL UNDERPLATE  
 SHELL: COPPER ALLOY, PREPLATED WITH MIN 0.76  $\mu$ m SEMI-BRIGHT NICKEL,  
 2.54  $\mu$ m TIN PLATED

**2. MAGNETICS**  
 -APPLICATION: 10/100/1000 BASE-T  
 -IMPEDANCE: 100 OHMS  
 -TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS  
 -OPEN CIRCUIT INDUCTANCE (OCL): 350  $\mu$ H MIN @100kHz, 0.1VRMS,  
 8mADC BIAS FROM 0°C TO 70°C, ALL FOUR PAIRS  
 -ALL FOUR PAIRS BI-DIRECTIONAL  
 -PERFORMANCE @ 25°C:  
 INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz  
 RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 40MHz  
 12-20LOG(f/80)dB MIN FROM 40.1MHz TO 100MHz  
 CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz  
 33-20LOG(f/50)dB MIN FROM 40.1MHz TO 100MHz  
 COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz  
 -ISOLATION VOLTAGE: 2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC  
 AND WITH ALL PORTS CONNECTED.

**3. OPERATING TEMPERATURE 0°C TO +70°C.**

**4. LED IS DRIVEN WITH CONSTANT CURRENT APPROX 20 mA**  
 DOMINANT WAVE LENGTH( $\lambda$ D): GREEN 568 nm TYP, AT IF=20mA  
 FORWARD VOLTAGE(VF): GREEN 2.2V AT IF=20mA  
 DOMINANT WAVE LENGTH( $\lambda$ D): YELLOW 588 nm TYP, AT IF=20mA  
 FORWARD VOLTAGE(VF): YELLOW 2.1V AT IF=20mA  
 DOMINANT WAVE LENGTH( $\lambda$ D): ORANGE 608 nm TYP, AT IF=20mA  
 FORWARD VOLTAGE(VF): ORANGE 2.1V AT IF=20mA

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

**6. TRP CONNECTOR LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY LOGO TO BE MARKED IN APPROXIMATE LOCATION SHOWN. DATE CODE YYWWD WHERE YY IS YEAR, WW IS WORK WEEK, D IS DAY OF WEEK, WITH SUNDAY = 1**

**7. MATING INTERFACE COMPLIES WITH USB SPECIFICATION REV 2.0.**

**8. THESE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK SOLDERING TEMPERATURE IS 260 °C MAX, 10 SECONDS MAX.**

3.56	GREEN/ORANGE	GREEN	1840031-4
3.56	GREEN	GREEN	1840031-3
3.18	GREEN/ORANGE	YELLOW	1840031-2
3.18	GREEN	GREEN	1840031-1
DIM A	LED 2	LED 1	PART NUMBER

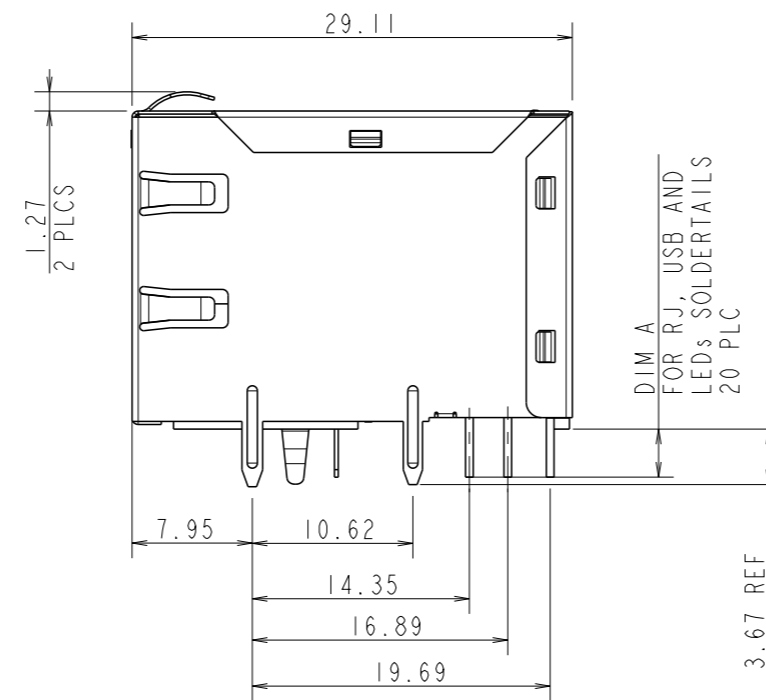
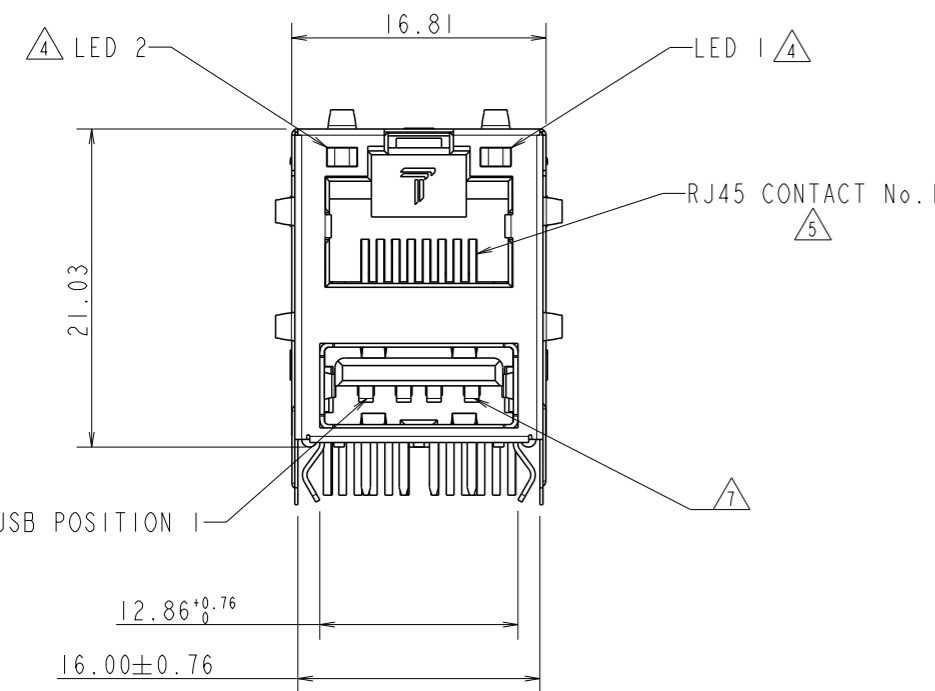
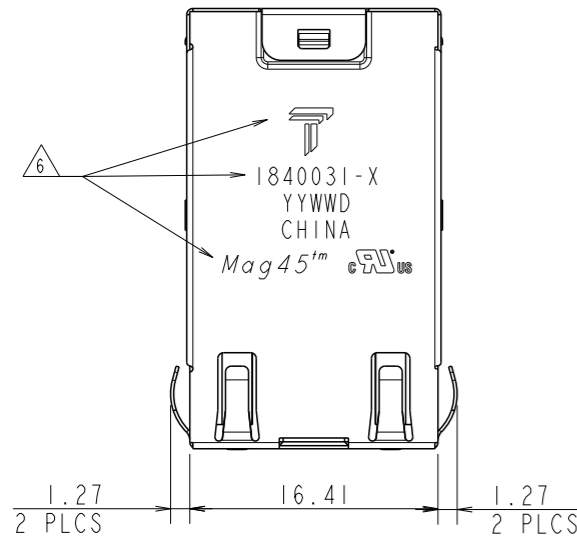
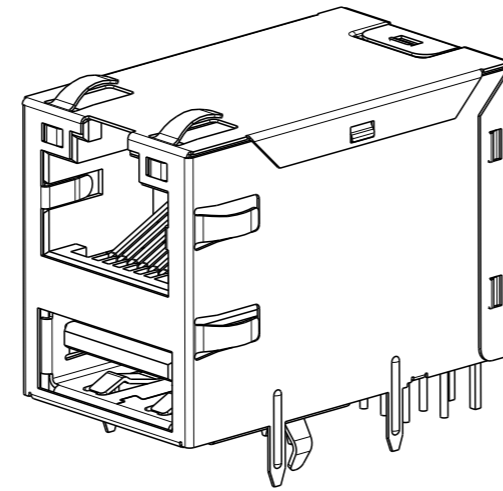
DWN	15-JUN-09	RICHARD QIAN
CHK	15-JUN-09	LIJUN RAO
APVD	15-JUN-09	KENNETH LAI
PRODUCT SPEC	108-104005	
APPLICATION SPEC	-	
WEIGHT	-	



TRP connector  
Dongguan China

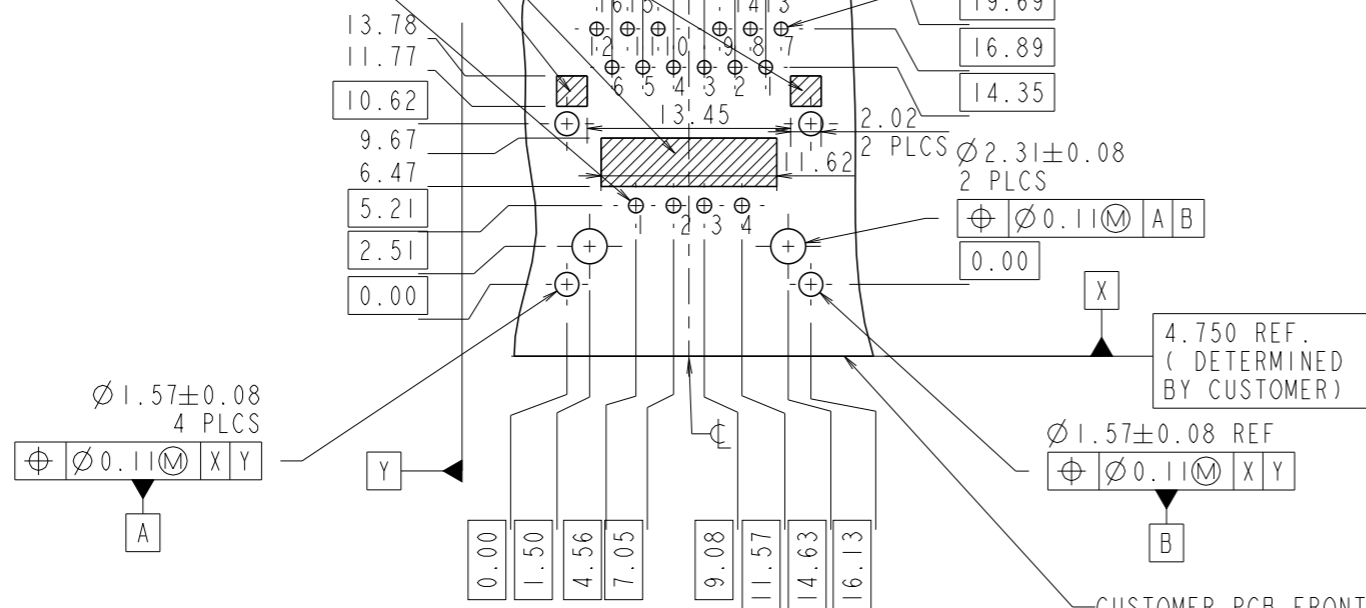
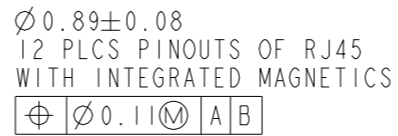
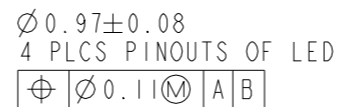
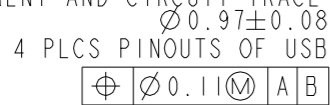
NAME MAG45(TM) OVER SINGLE USB, URG41 GIGABIT CIRCUIT WITH LEDS			
SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	00779	C=1840031	-

CUSTOMER DRAWING	SCALE	SHEET	OF	REV
	2:1	1	2	E



THIS DRAWING IS A CONTROLLED DOCUMENT.	
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:
	0 PLC $\pm$
	1 PLC $\pm$
	2 PLC $\pm$ 0.25
	3 PLC $\pm$ 0.25
	4 PLC $\pm$
	ANGLES $\pm$
MATERIAL	FINISH
-	-

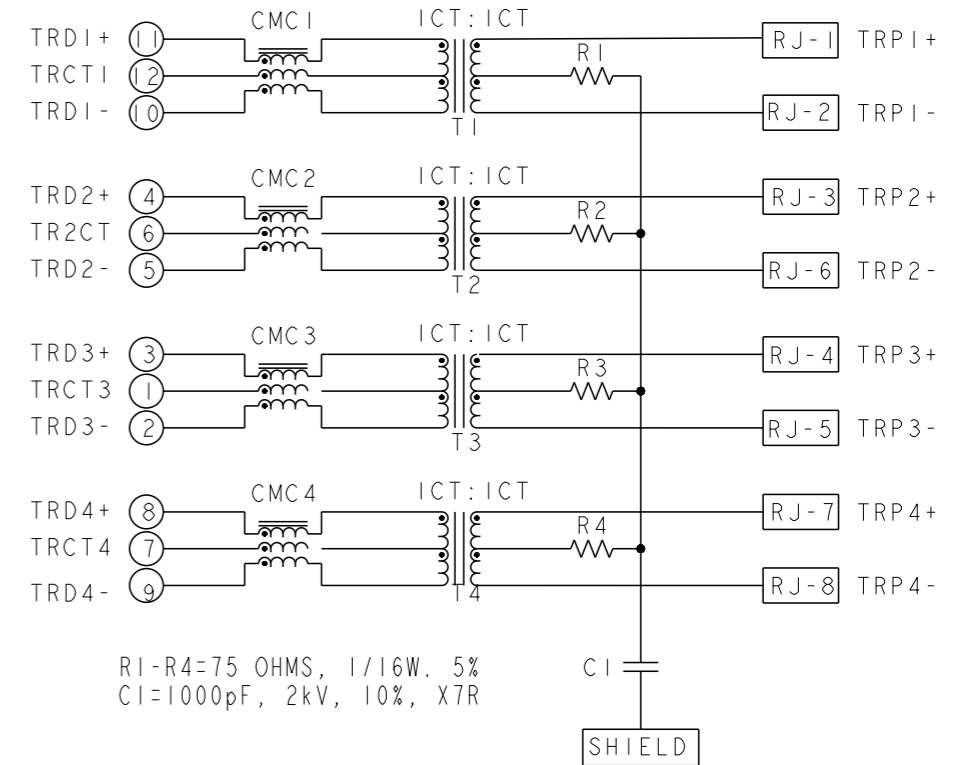
IT IS RECOMMENDED THAT THE SHADED AREA OF CUSTOMER PC BOARD SHOULD BE CLEAR OF ANY VIA HOLE, COMPONENT AND CIRCUIT TRACE



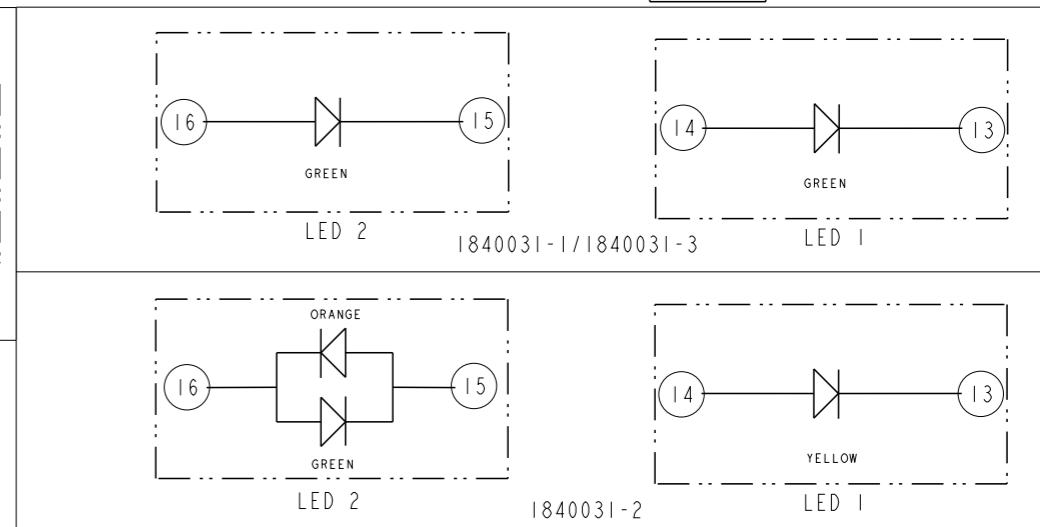
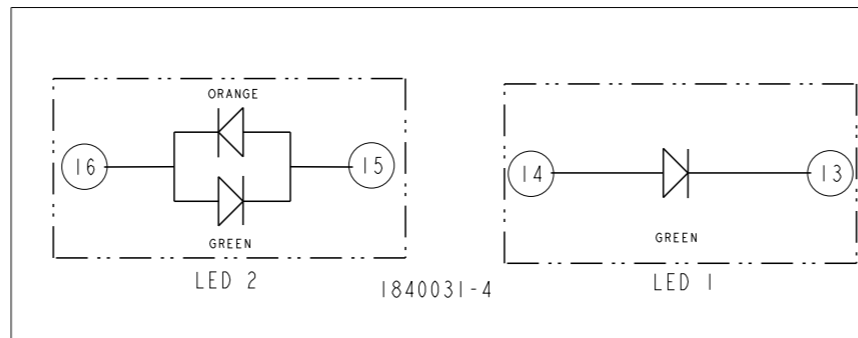
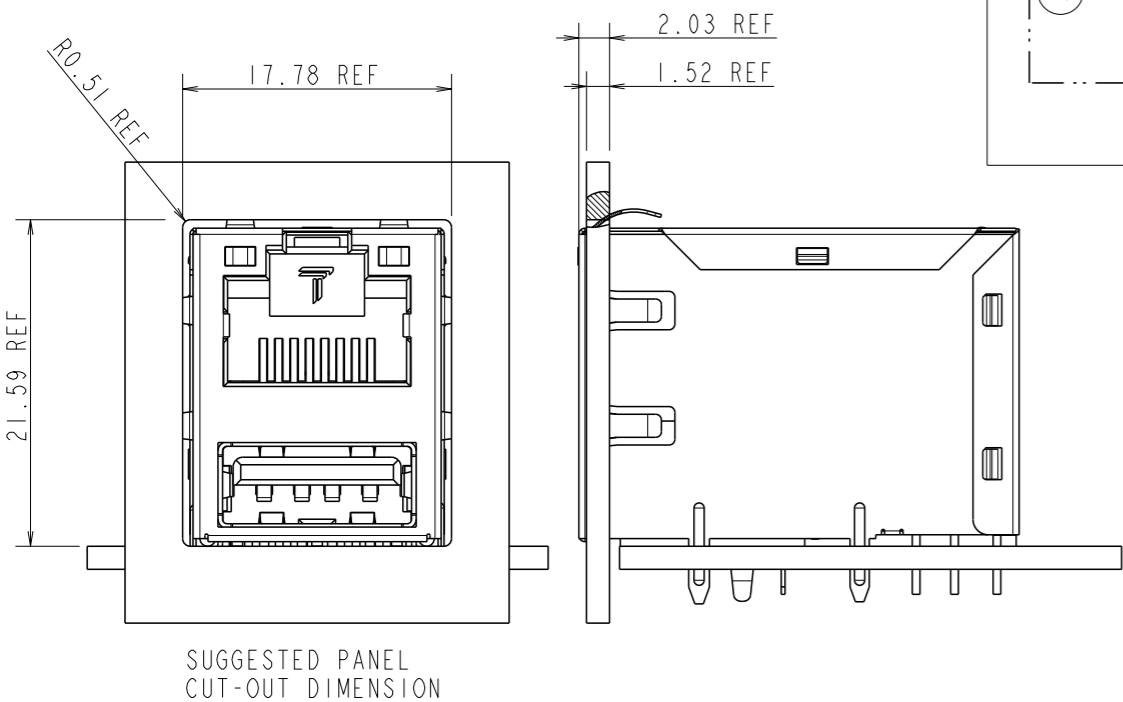
RECOMMENDED PCB FOOTPRINT COMPONENT SIDE SHOWN

CUSTOMER PCB FRONT EDGE

### URG41 GIGABIT CIRCUIT



R1-R4=75 OHMS, 1/16W, 5%  
C1=1000pF, 2kV, 10%, X7R



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN	15-JUN-09		TRP connector Dongguan China			
		CHK	15-JUN-09		NAME MAG45(TM) OVER SINGLE USB, URG41 GIGABIT CIRCUIT WITH LEDS			
		APVD	15-JUN-09		PRODUCT SPEC	108-104005	RESTRICTED TO	
					APPLICATION SPEC	-		
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		SIZE	A3	CAGE CODE	00779	
		0 PLC	±-	DRAWING NO	C=1840031		SCALE	2:1
		1 PLC	±-	WEIGHT	-		SHEET	2 OF 2
		2 PLC	±0.25	CUSTOMER DRAWING			REV	E
		3 PLC	±0.25					
		4 PLC	±-					
		ANGLES	±-					
MATERIAL		FINISH	-					