

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 μ m SEMI-BRIGHT NICKEL
POST DIPPED WITH 2.54 μ m MIN SAC SOLDER AT GROUND PINS.
CONTACT: PHOSPHOR BRONZE, PLATED WITH 1.27 μ m MIN OVERALL NICKEL
UNDERPLATE, SELECTIVE 1.27 μ m MIN GOLD AT MATING INTERFACE AND 2.54 μ m
MIN MATTE TIN ON SOLDER TAILS. OR 1.27 μ m MIN NICKEL UNDERPLATE,
WITH 0.05 μ m GOLD PLATING OVER 0.76 μ m MIN PALLADIUM NICKEL PLATING AT
MATING INTERFACE AND 2.54 μ m MIN MATTE TIN ON SOLDER TAILS.
SOLDER TAIL: COPPER STEEL, PLATED WITH 2.54 μ m MIN MATTE TIN
LED: DIFFUSED EPOXY LENS, 0.5 mm SQUARE CARBON STEEL WIREFRAME
LEADS PREPLATED WITH 2.03 μ m MIN SILVER OVER 1.02 μ m MIN
NICKEL OVER 1.02 μ m MIN COPPER UNDERPLATE
POST PLATED WITH 2.54 μ m MIN MATTE TIN OR SAC TIN SOLDER DIP
USB MATERIALS:
HOUSING: THERMOPLASTIC,FLAMMABILITY RATED UL94V-0
CONTACT: COPPER ALLOY WITH 0.76 MIN GOLD PLATING OVER 1.27 μ m MIN
OVERALL NICKEL UNDERPLATE
SHELL: COPPER ALLOY, PREPLATED WITH MIN 0.76 μ m SEMI-BRIGHT NICKEL,
2.54 μ 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 μ 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(λ D): GREEN 568 nm TYP, AT IF=20mA
FORWARD VOLTAGE(VF): GREEN 2.2V AT IF=20mA
DOMINANT WAVE LENGTH(λ D): YELLOW 588 nm TYP, AT IF=20mA
FORWARD VOLTAGE(VF): YELLOW 2.1V AT IF=20mA
DOMINANT WAVE LENGTH(λ D): ORANGE 608 nm TYP, AT IF=20mA
FORWARD VOLTAGE(VF): ORANGE 2.1V AT IF=20mA


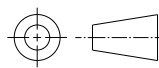
5. RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.

6. TRP CONNECTOR LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN
AND AGENCY LOGO TO BE MARKED IN APPROXIMATE LOCATION SHOWN. DATE CODE
YYWW 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.

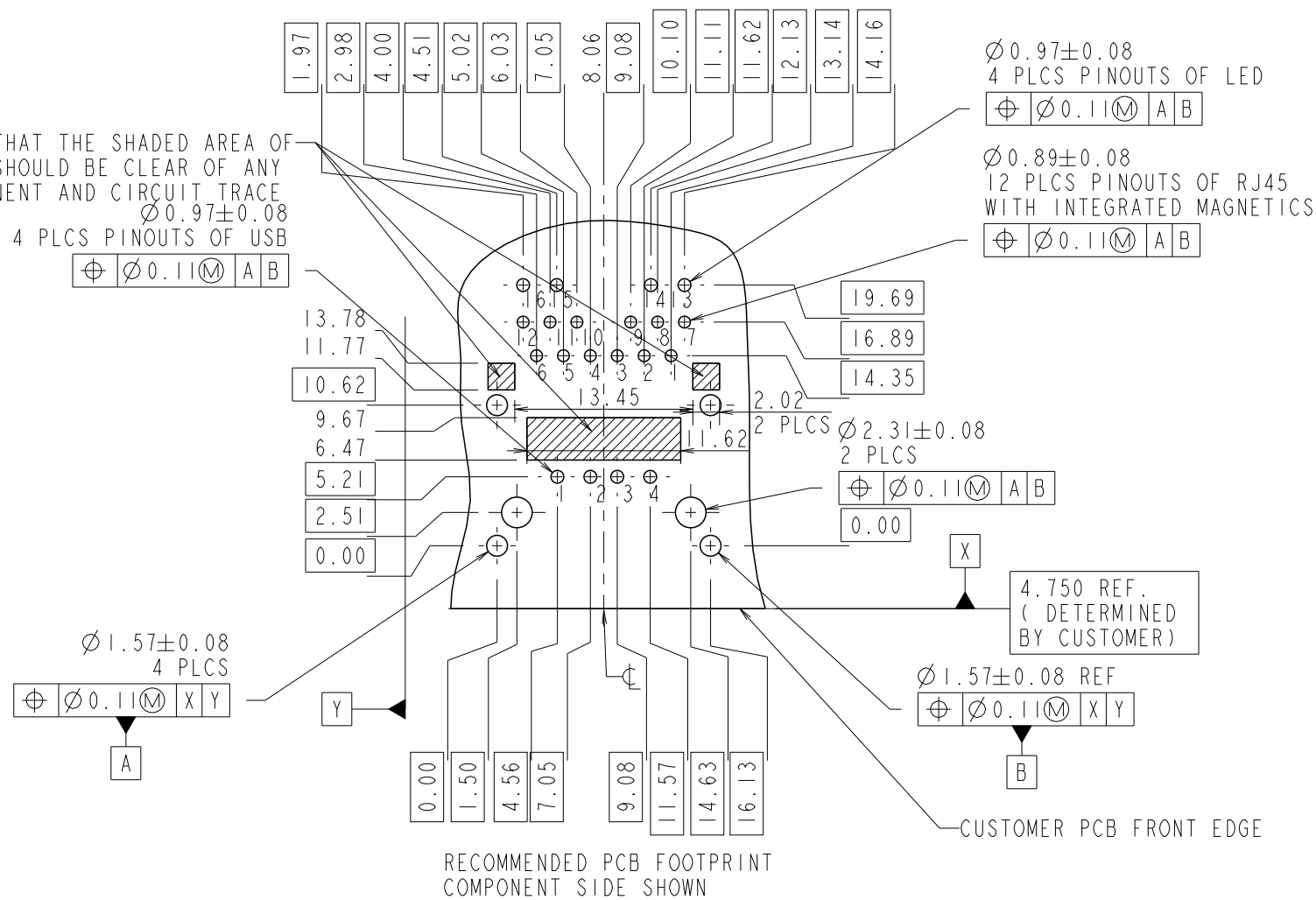
3.56	GREEN/ORANGE	GREEN	1840031-4
3.56	GREEN	GREEN	1840031-3
3.18	GREEN/ORANGE	YELLOW	1840031-2
3.18	GREEN	GREEN	1840031-1
DIM A	LED 2	LED 1	PART NUMBER

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

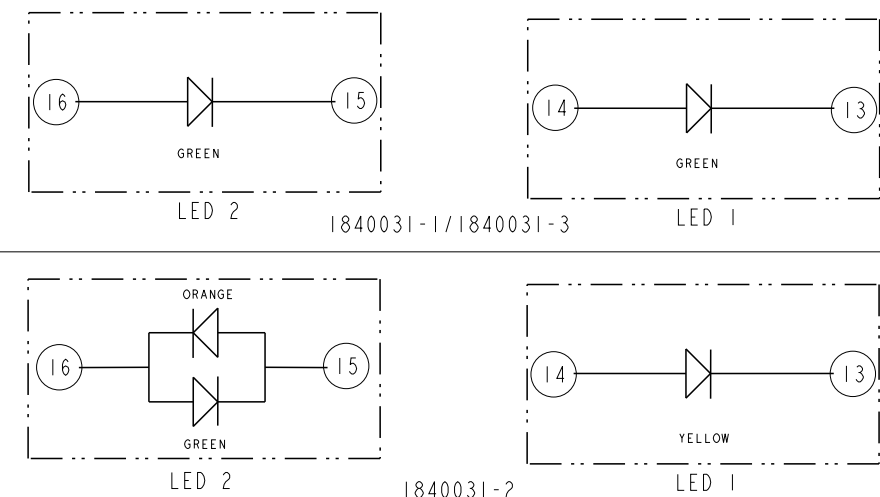
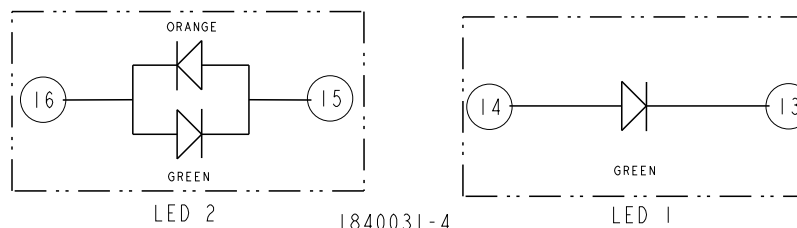
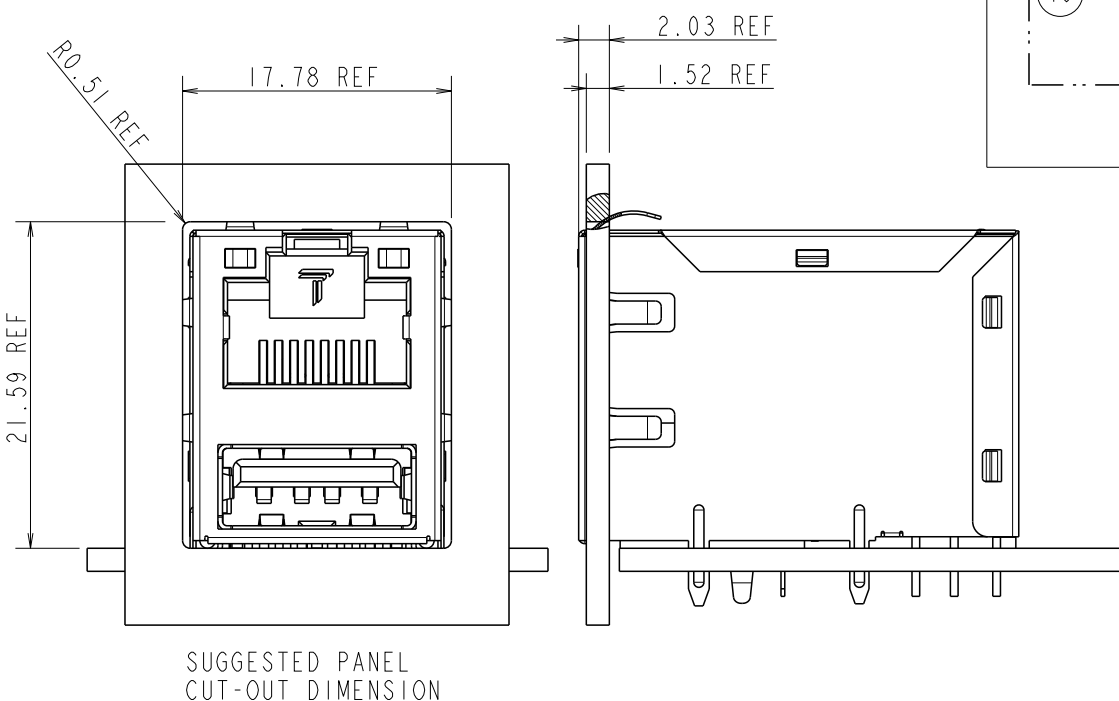
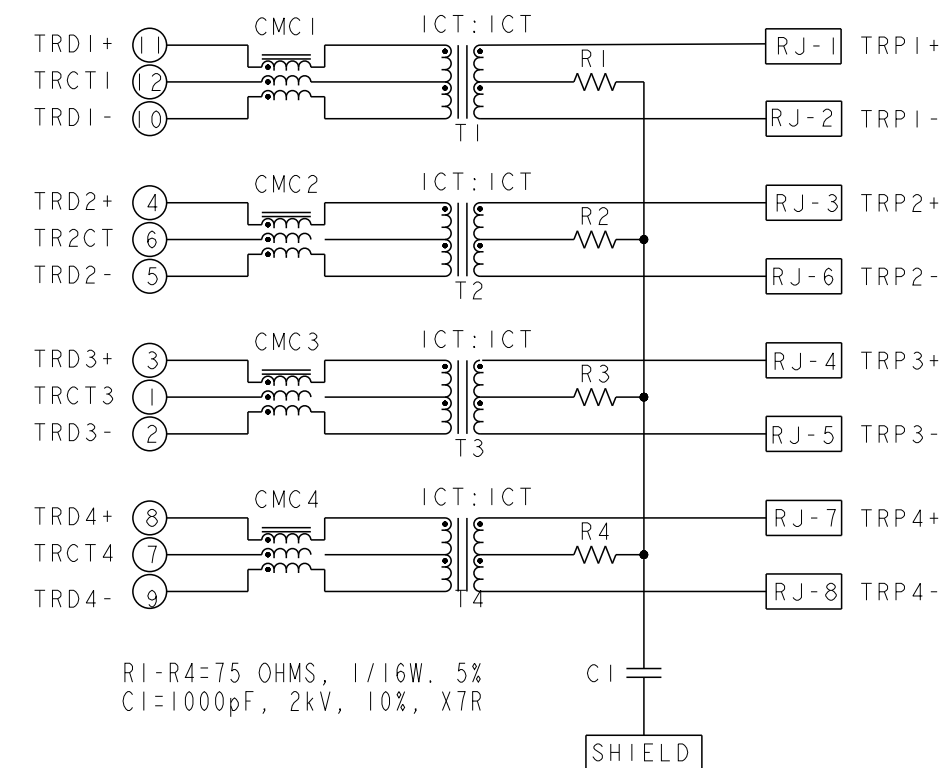
IT IS RECOMMENDED THAT THE SHADED AREA OF CUSTOMER PC BOARD SHOULD BE CLEAR OF ANY VIA HOLE, COMPONENT AND CIRCUIT TRACE

$\varnothing 0.97 \pm 0.08$
4 PLCS PINOUTS OF USB

$\varnothing 0.11 \text{M}$ A B



URG41 GIGABIT CIRCUIT



THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:
mm	
	0 PLC ±
	1 PLC ±
	2 PLC ±0.25
	3 PLC ±0.25
	4 PLC ±
	ANGLES ±
MATERIAL	FINISH

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

				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			
SCALE			SHEET	OF	REV
2:1			2	2	E