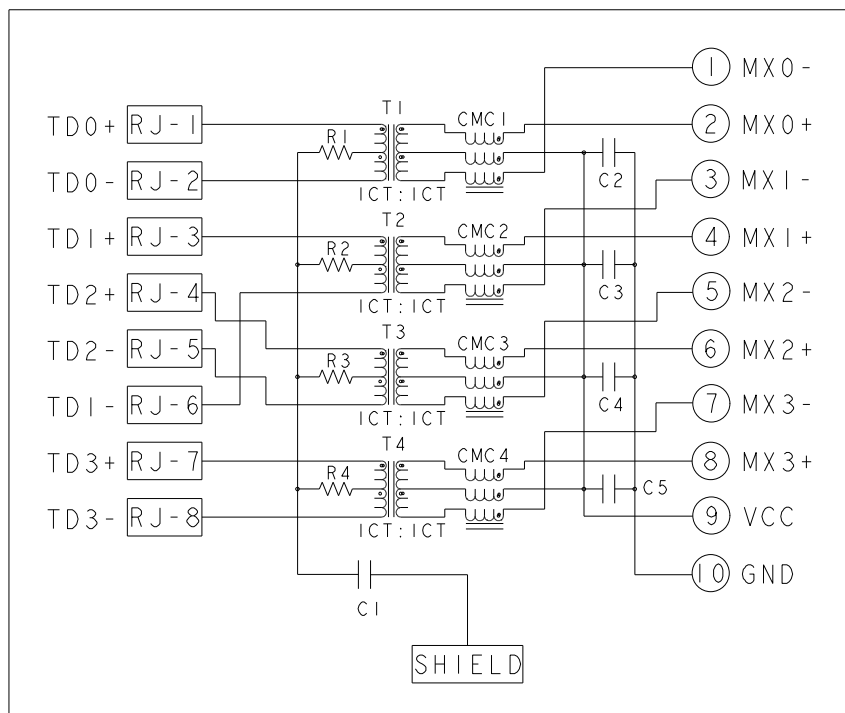


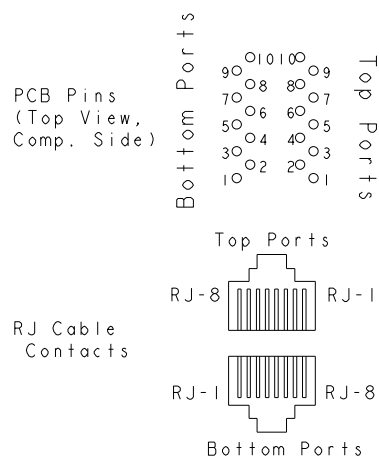
S8G31 GIGABIT CIRCUIT ²₇ Top and Bottom Ports



C1 = 1000pF, 2kV
 C2-C5 = 470pF, 10%, 50V
 R1-R4 = 75ohms, 1/16W

Pin Designations

(Repeat for each vertical pair of ports.)



- 1 MATERIALS:
 - HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATING UL 94V-0.
 - SHIELD: BRASS, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL, POST DIPPED WITH 2.54um MIN SAC SOLDER ON SOLDER TAILS.
 - CONTACTS: PHOSPHOR BRONZE, PLATED WITH 1.27um MIN OVERALL NICKEL UNDERPLATE, SELECTIVE 1.27um MIN GOLD AT MATING INTERFACE AND 2.54um MIN MATTE TIN ON SOLDER TAILS.
 - LED: DIFFUSED EPOXY LENS, CARBON STEEL LEAD FRAME LEADS, PREPLATED WITH 2.03um MIN SILVER OVER 1.02um 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: 10/100/1000 BASE-T
 - IMPEDANCE: 100ohm
 - TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS
 - OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS, 8mA DC 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: COMPLIES WITH IEEE802.3 2005, PARA 40.6.1.1, ITEM b
- 3 PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN THE APPROXIMATE AREA SHOWN. DATE CODE "YY" IS THE YEAR, "WW" IS THE WEEK, "D" IS THE DAY OF WEEK, WITH SUNDAY="1".
- 4 TRP LOGO AND AGENCY APPROVAL LOGO ARE LOCATED IN THE APPROXIMATE AREA SHOWN.
- 5 RJ45 CAVITIES CONFORM TO FCC RULES AND REGULATIONS PART 68 SUBPART F.
- 6 LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA
 LED COLOR: DOMINANT WAVELENGTH (λD):
 GREEN 568 nm TYP at IF=20mA
 YELLOW 588 nm TYP at IF=20mA
 ORANGE 610 nm TYP at IF=20mA
 FORWARD VOLTAGE (VF):
 GREEN 2.2V TYP at IF=20mA
 YELLOW 2.1V TYP at IF=20mA
 ORANGE 2.2V TYP at IF=20mA
- 7 INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.
- 8 OPERATING TEMPERATURE: FROM 0°C TO 70°C
- 9 THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, TEMPERATURE 260 °C MAX PEAK 10 SECONDS MAX. IT IS RECOMMENDED THAT THE CONNECTOR SHIELD AND BODY BE MASKED TO PROTECT IT FROM DIRECT EXPOSURE TO THE SOLDER WAVE TO AVOID DAMAGE TO THE CONNECTOR AND LEDS

3.80	YELLOW	GREEN	YELLOW	GREEN	3	1-1840230-3
3.30	GREEN/ORANGE	GREEN/ORANGE	GREEN/ORANGE	GREEN/ORANGE	3	1840230-7
3.30	GREEN/ORANGE	GREEN	GREEN/ORANGE	GREEN	3	1840230-6
3.30	GREEN	GREEN/YELLOW	GREEN	GREEN/YELLOW	3	1840230-5
3.30	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	3	1840230-4
3.30	YELLOW	GREEN	YELLOW	GREEN	3	1840230-3
3.30	YELLOW	GREEN	GREEN	YELLOW	3	1840230-2
3.30	GREEN	GREEN	GREEN	GREEN	3	1840230-1
DIM A	TOP RIGHT LED	TOP LEFT LED	BOTTOM RIGHT LED	BOTTOM LEFT LED	REAR PCB GND TABS	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC	±
1 PLC	±
2 PLC	±0.25
3 PLC	±
4 PLC	±
ANGLES	±

PRODUCT SPEC: 108-104004

APPLICATION SPEC: -

THIS DRAWING IS A CONTROLLED DOCUMENT.

DWN: JEE LUD 05OCT2006
 CHN: KEITH ZHU 05OCT2006
 APPV: 05OCT2006

trp CONNECTOR
 a bel group

DONGGUAN CHINA

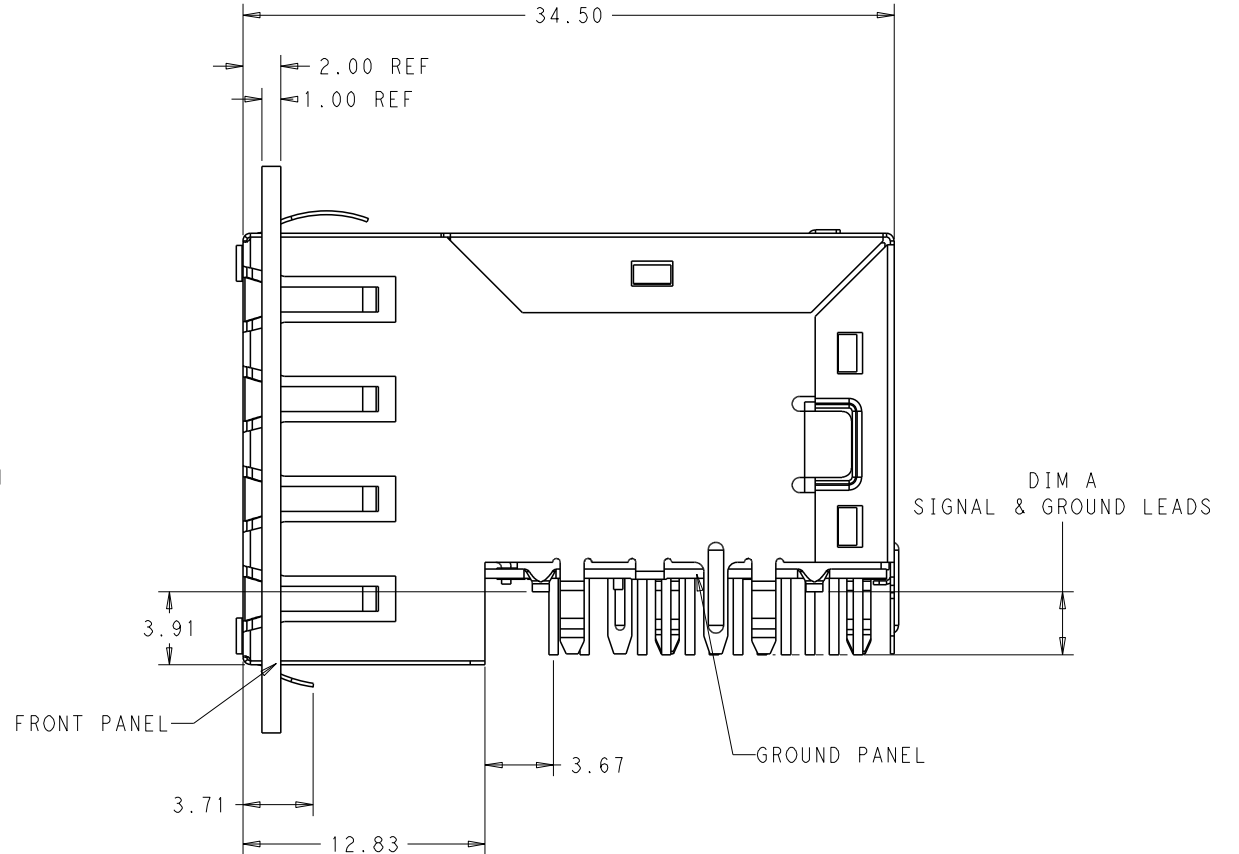
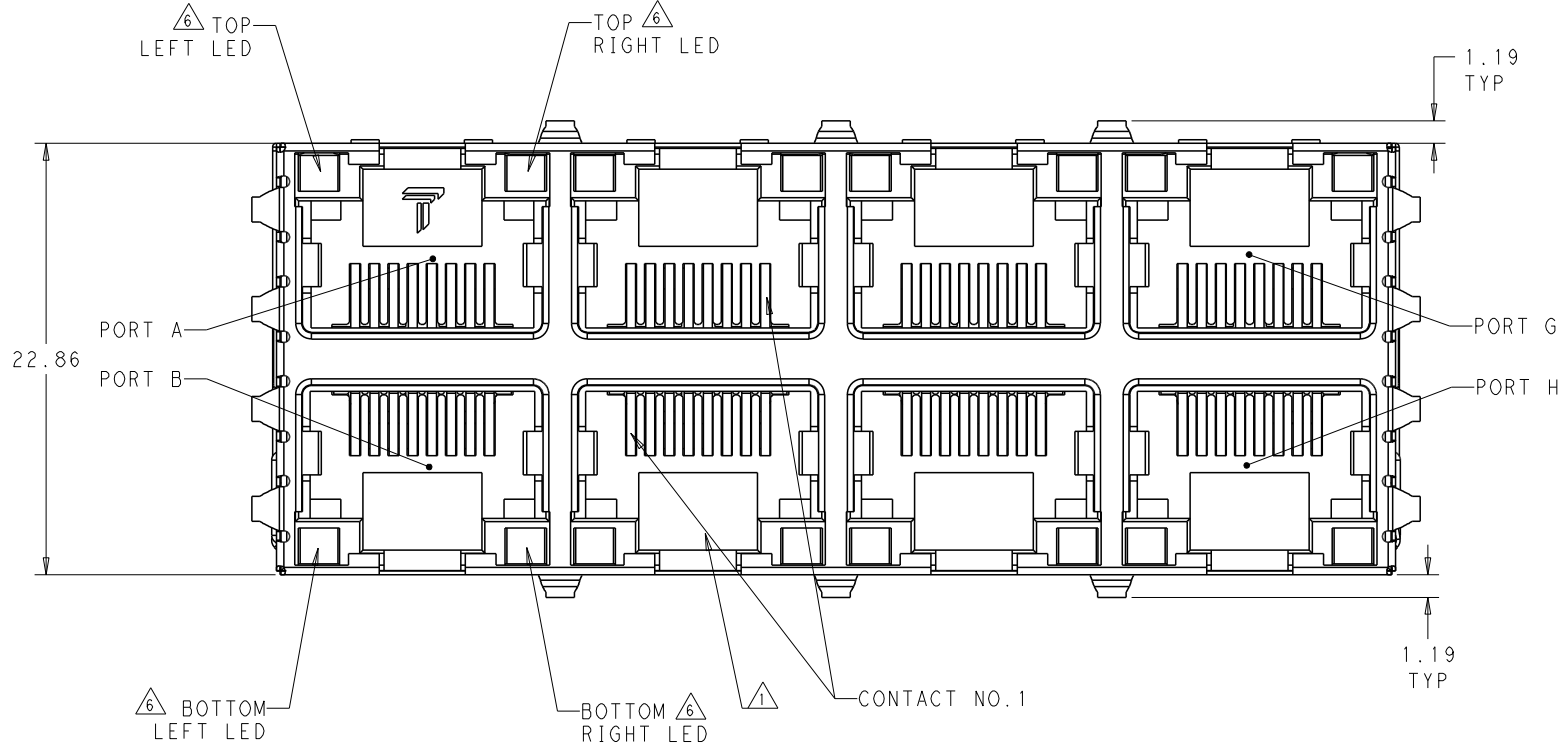
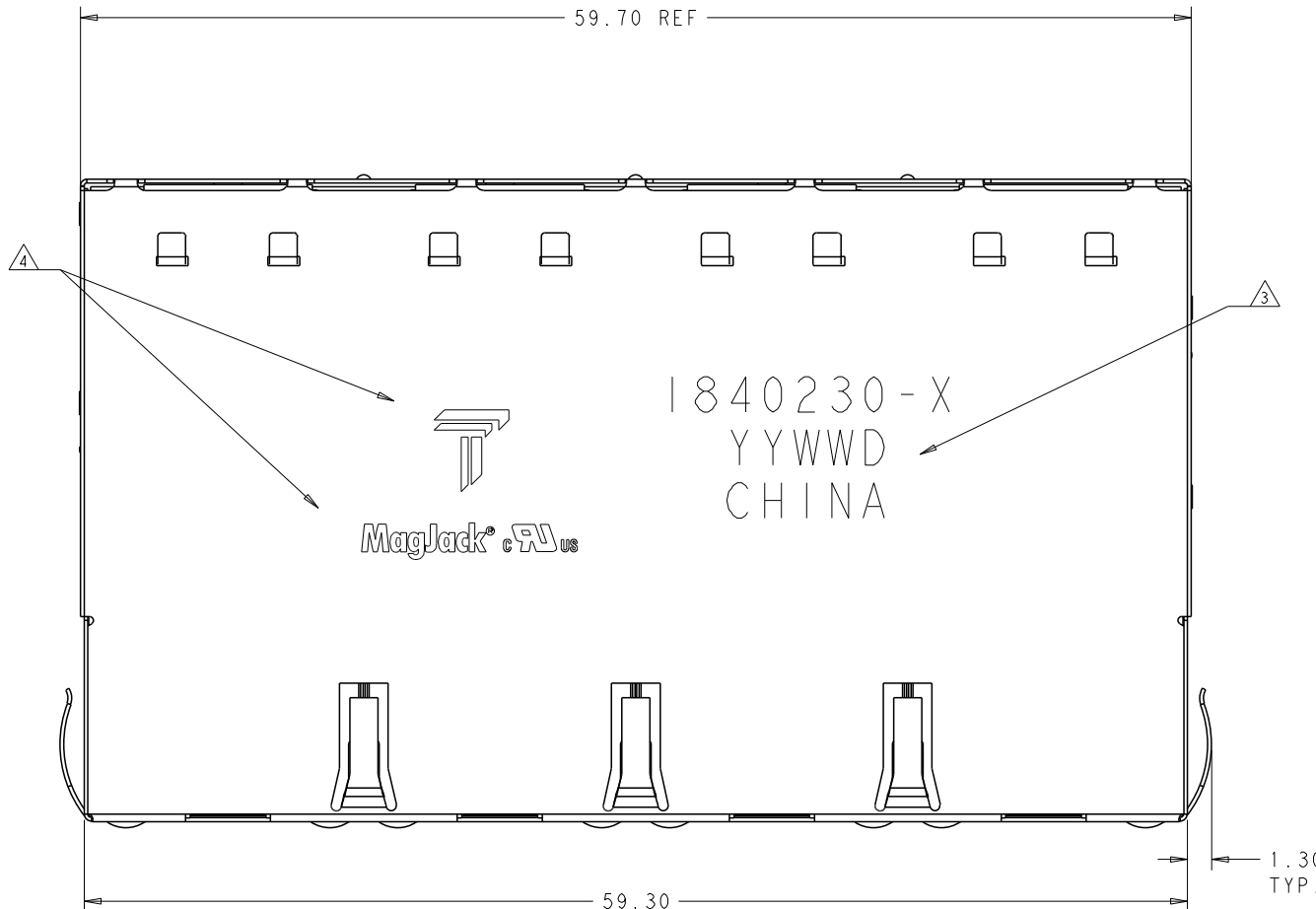
MODEL NAME: MAGJACK
 DESC: 2X4 S8G31 GIGABIT OFFSET W/ LED

SIZE: A1
 CAGE CODE: 1840230
 DRAWING NO: 108-104004

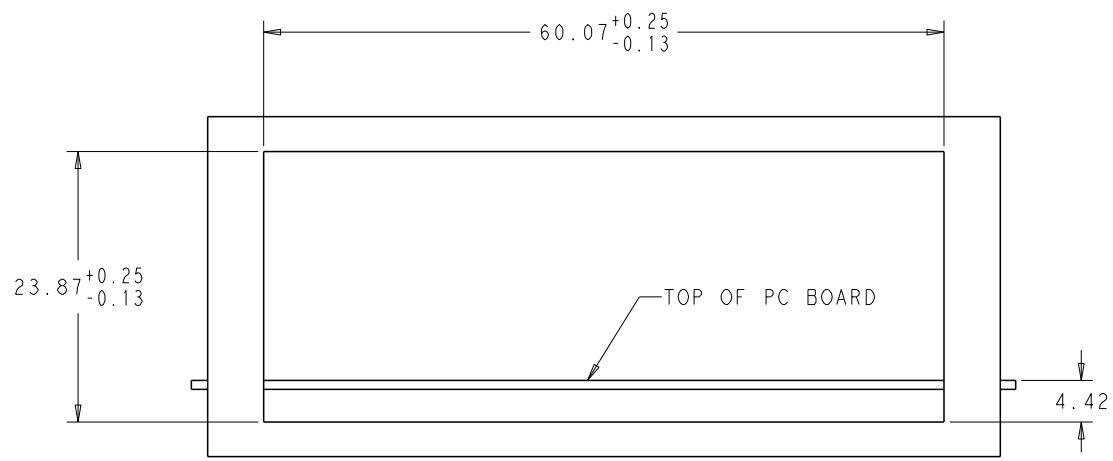
RESTRICTED TO: -

CUSTOMER DRAWING

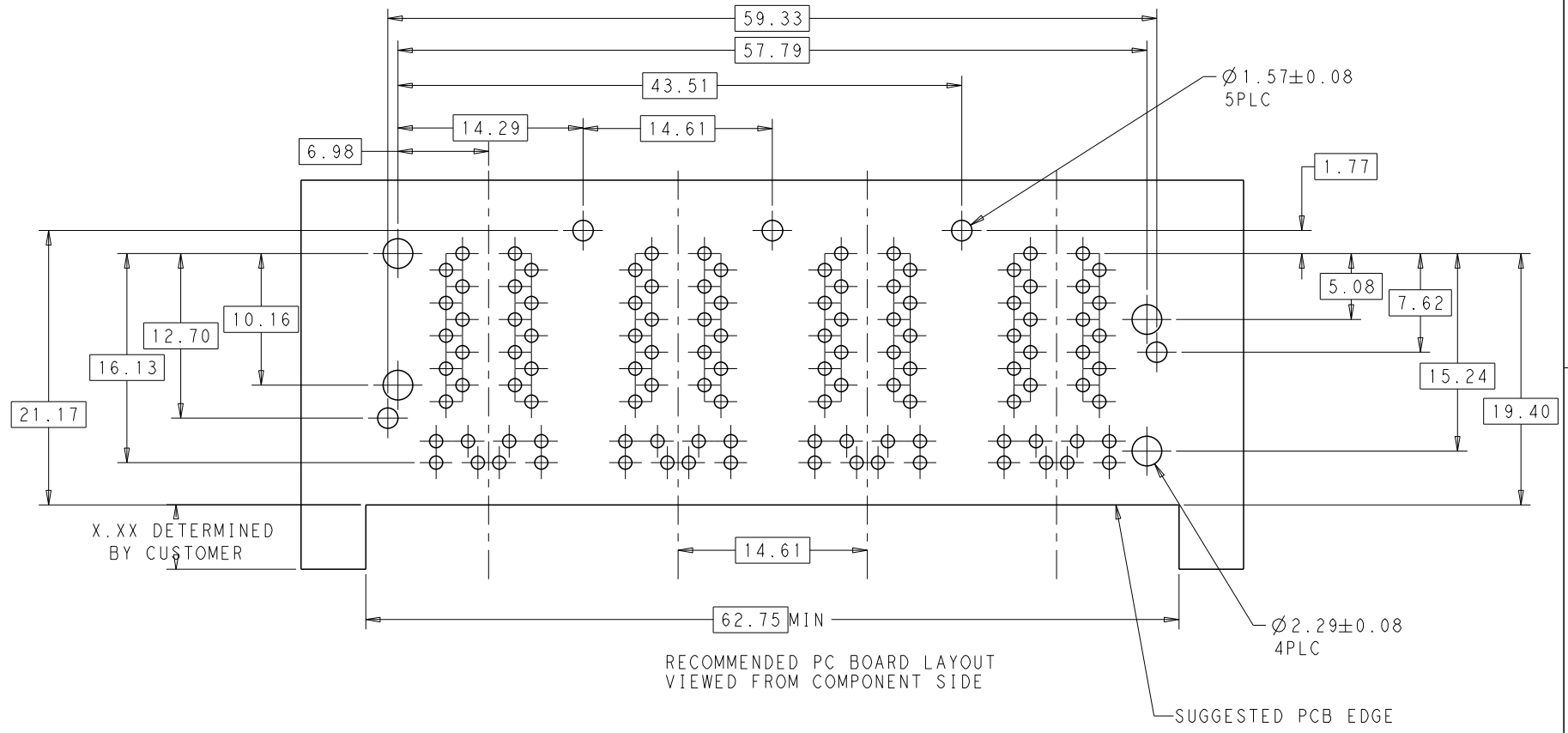
SCALE: 4:1 SHEET 1 OF 4 REV F



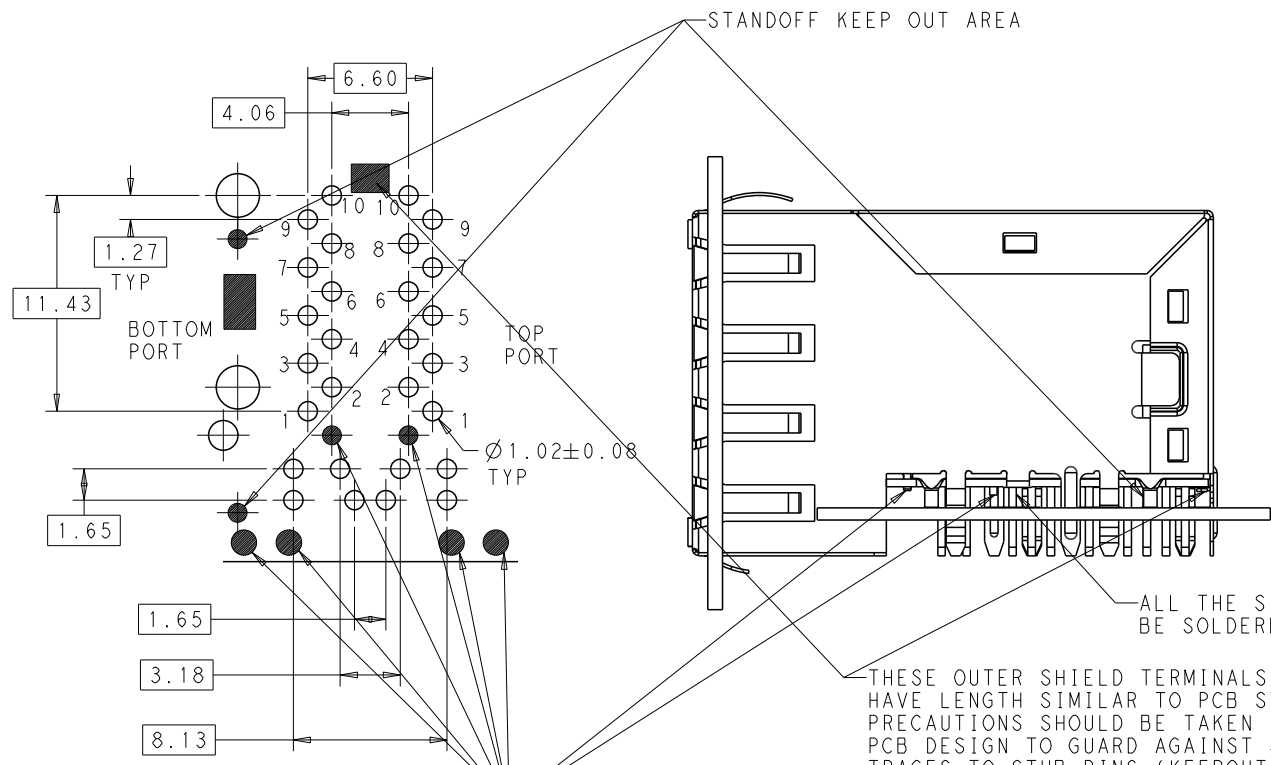
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: JEE LUO 05OCT2006	 DONGGUAN CHINA
DIMENSIONS: mm		CHK: KEITH ZHU 05OCT2006	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: 05OCT2006	
0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±	PRODUCT SPEC 108-104004 APPLICATION SPEC -	MODEL NAME: MAGJACK DESC: 2X4 S8G31 GIGABIT OFFSET W/ LED STACK NON-PoE	SIZE: A1 CAGE CODE: C=1840230 DRAWING NO: 108-104004 SHEET 2 OF 4 REV F



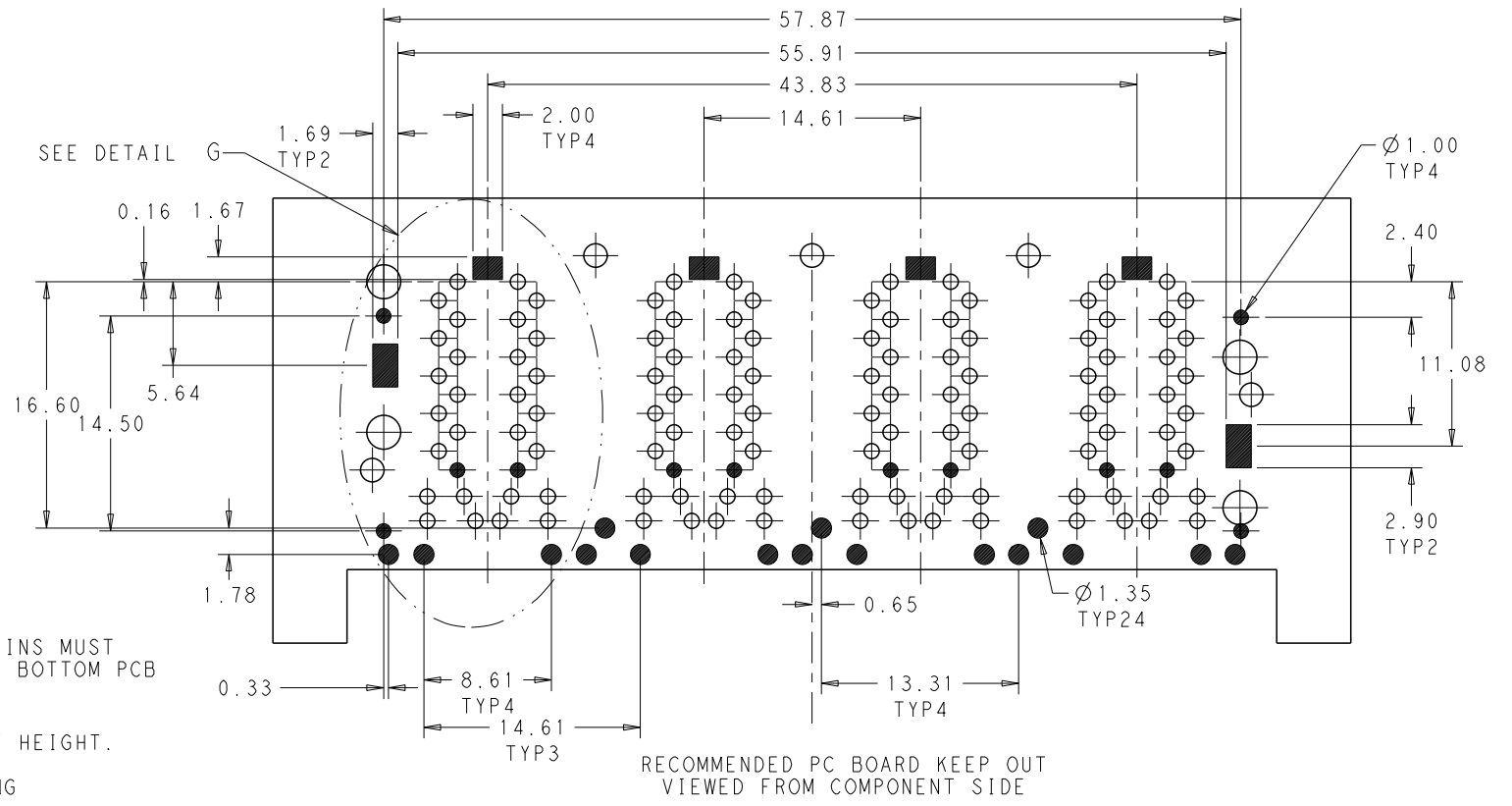
RECOMMENDED PANEL CUT-OUT



RECOMMENDED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE

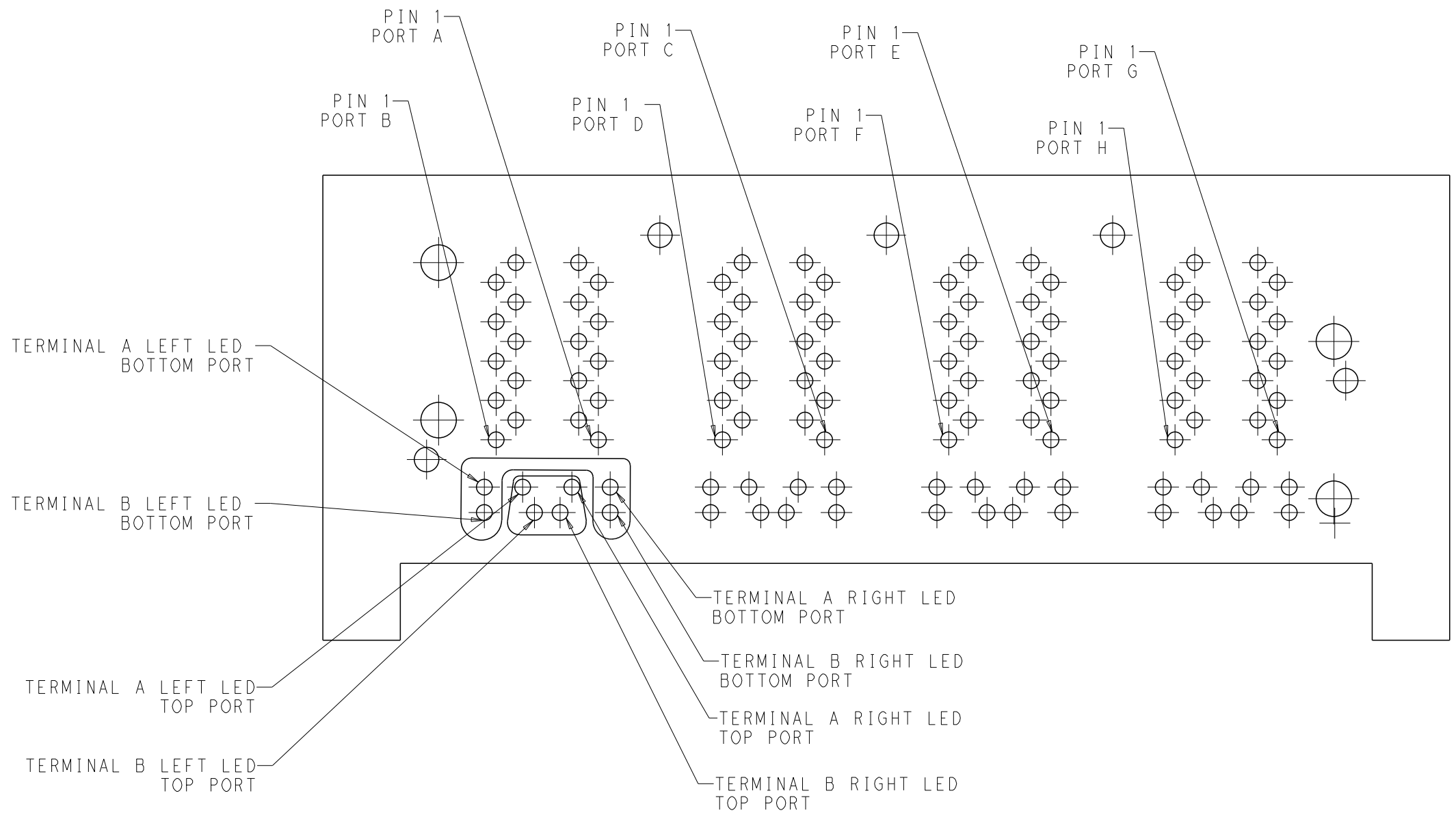


DETAIL G SCALE 5:1



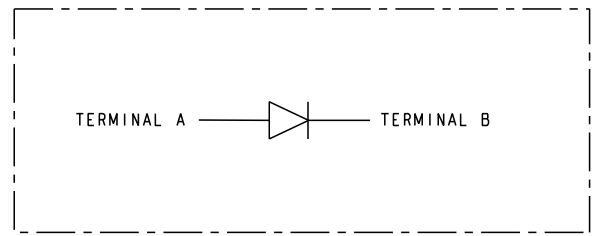
RECOMMENDED PC BOARD KEEP OUT VIEWED FROM COMPONENT SIDE

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: JEE LUO 05OCT2006	trp CONNECTOR a bel group	DONGGUAN CHINA	
DIMENSIONS: mm		CHK: KEITH ZHU 05OCT2006		MODEL NAME: MAGJACK	DESC: 2X4 S8G31 GIGABIT OFFSET W/ LED
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: 05OCT2006		SIZE: A1	CAGE CODE: 1840230
0 PLC ± 1 PLC ±0.25 2 PLC ± 3 PLC ± 4 PLC ± ANGLES ±	APPLICATION SPEC 108-104004	PRODUCT SPEC	SCALE: 4:1	SHEET 3 OF 4 REV F	

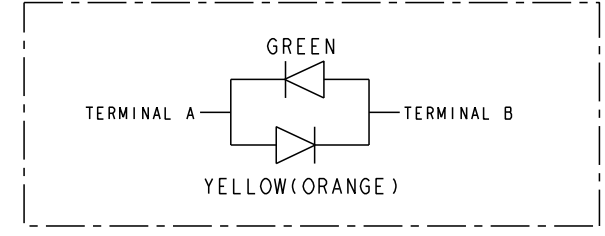



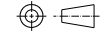
LED HOLE DESIGNATIONS VIEWED FROM COMPONENT SIDE

SINGLE COLOR LED



BI COLOR LED



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: JEE LUO 05OCT2006	 DONGGUAN CHINA
DIMENSIONS: mm		CHK: KEITH ZHU 05OCT2006	
 0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±		APVD: 05OCT2006	
PRODUCT SPEC 108-104004	APPLICATION SPEC -	MODEL NAME MAGJACK STACK NON-PoE	DESC 2X4 S8G31 GIGABIT OFFSET W/ LED SIZE: A1 CAGE CODE: 1840230 DRAWING NO: 1840230 RESTRICTED TO: - SCALE: 4:1 SHEET: 4 OF 4 REV: F