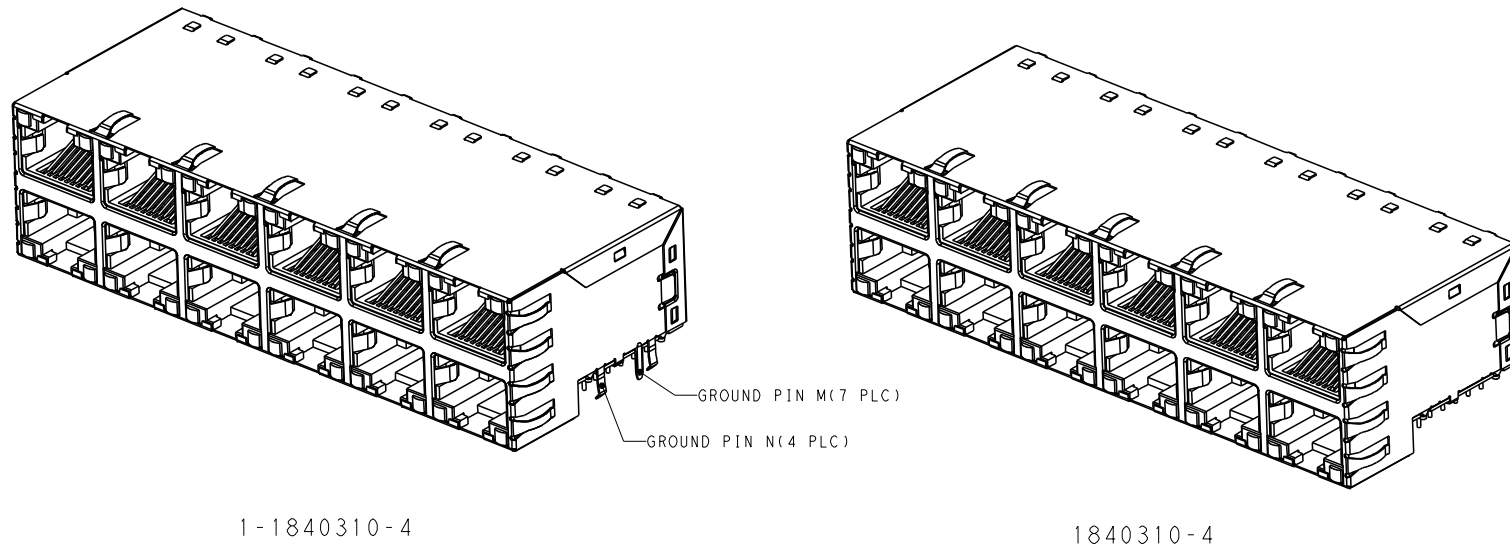


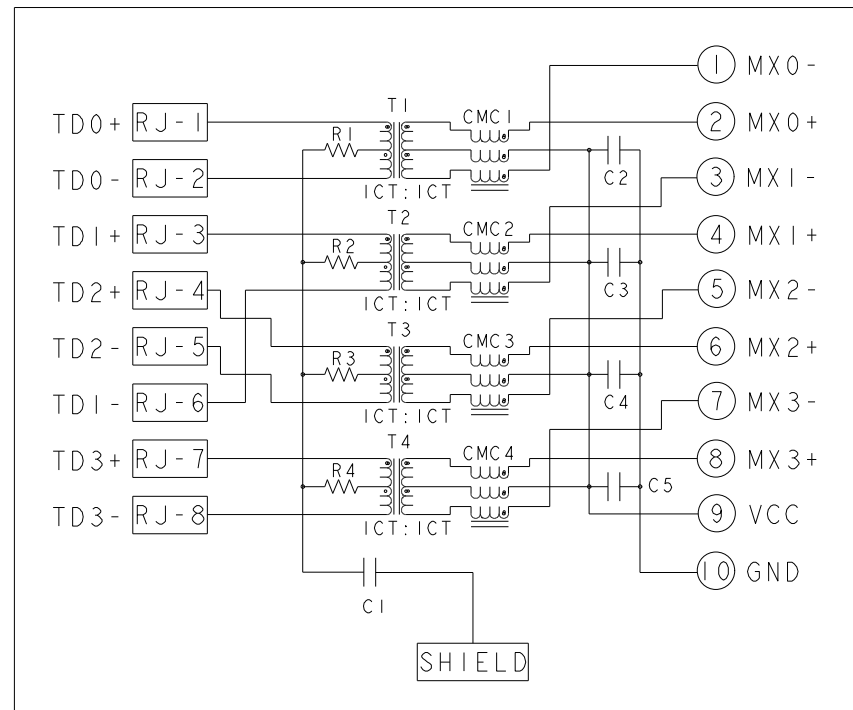
THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

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				
#	LTN	DESCRIPTION	DATE	OWN APVD
G		EC-1411035 COMPANY LOGO CHANGE	29JAN2015	TR TY



S8G31 GIGABIT CIRCUIT $\Delta\Delta$ Top and Bottom Ports

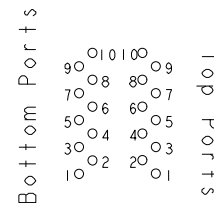


C1 = 1000pF, 2kV
 C2-C5 = 470pF, 10%, 50V
 R1-R4 = 75ohms, 1/16W

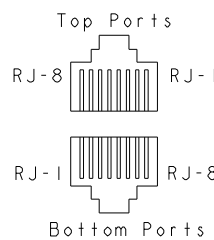
Pin Designations

(Repeat for each vertical pair of ports.)

PCB Pins
 (Top View,
 Comp. Side)



RJ Cable
 Contacts



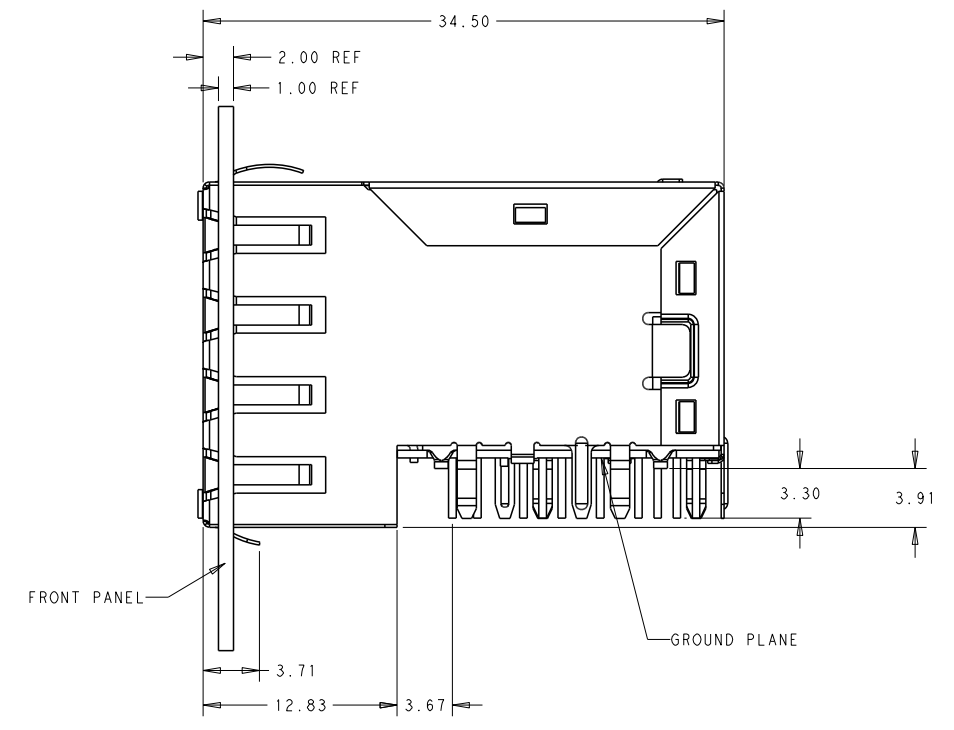
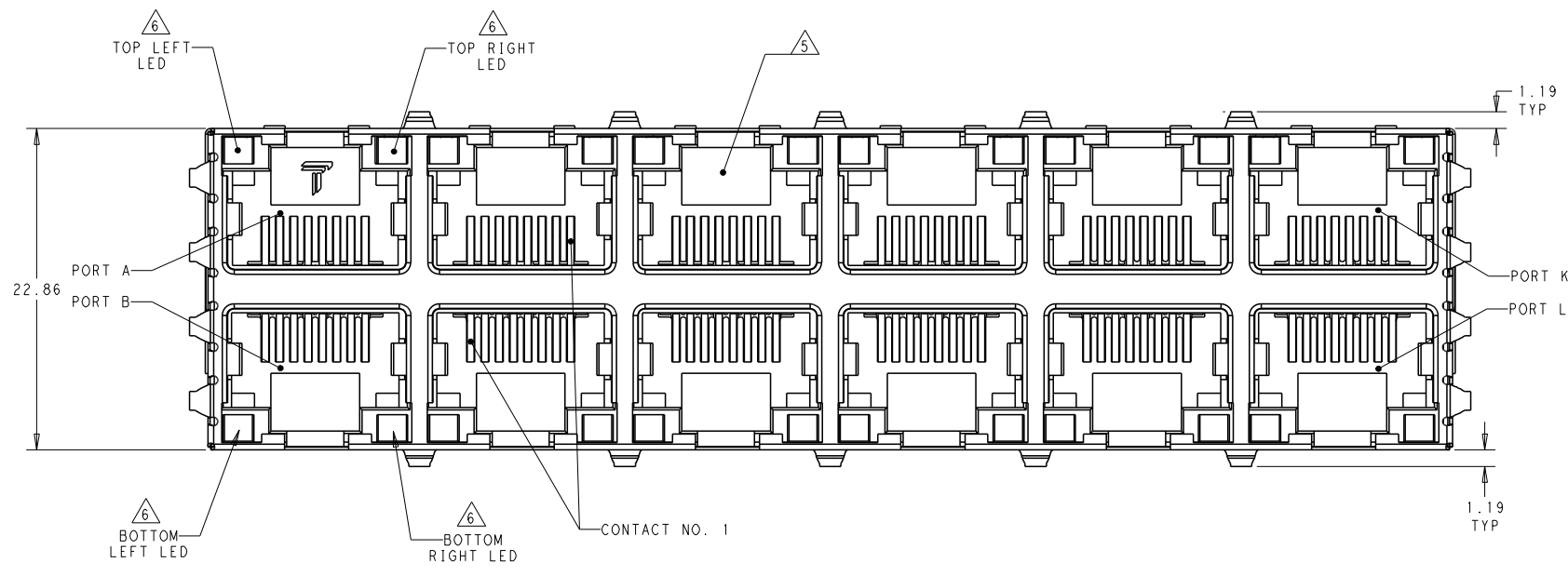
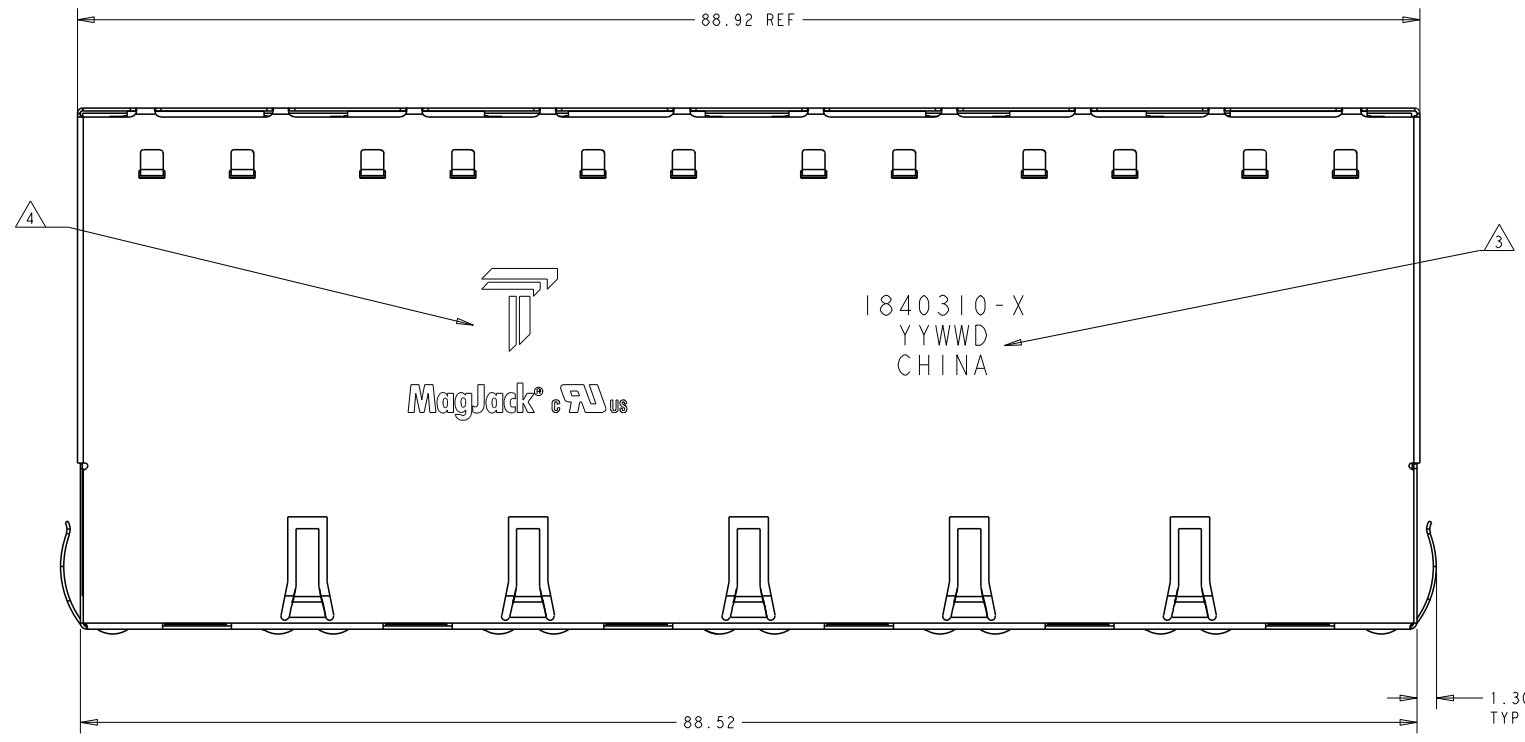
- MATERIALS:**
 - HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATING UL 94V-0.
 - SHIELD: BRASS, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL, POST DIPPED WITH 2.54um MIN SAC SOLDER ON SOLDER TAILS.
 - CONTACTS: PHOSPHOR BRONZE, PLATED WITH 1.27um MIN OVERALL NICKEL UNDERPLATE, SELECTIVE 1.27um MIN GOLD 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.
- MAGNETICS**
 - APPLICATION: 10/100/1000 BASE-T
 - IMPEDANCE: 100 Ohms
 - TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS
 - OPEN CIRCUIT INDUCTANCE (OCL): 350uH 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: COMPLIES WITH IEEE802.3 2002, PARA, 40.6.1.1 ITEM b.
- PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN THE APPROXIMATE AREA SHOWN. DATE CODE YYWW WHERE "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK WITH SUNDAY=1
- TRP CONNECTOR LOGO AND AGENCY APPROVAL LOGO ARE LOCATED IN THE APPROXIMATE AREA SHOWN.
- RJ45 CAVITIES CONFORM TO FCC RULES AND REGULATION PART 68 SUBPART F.
- LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX. 20mA.
 LED COLOR: DOMINANT WAVELENGTH (λD)
 GREEN 568nm 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
- INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.

8. OPERATING TEMPERATURE: FROM 0 °C TO 70 °C

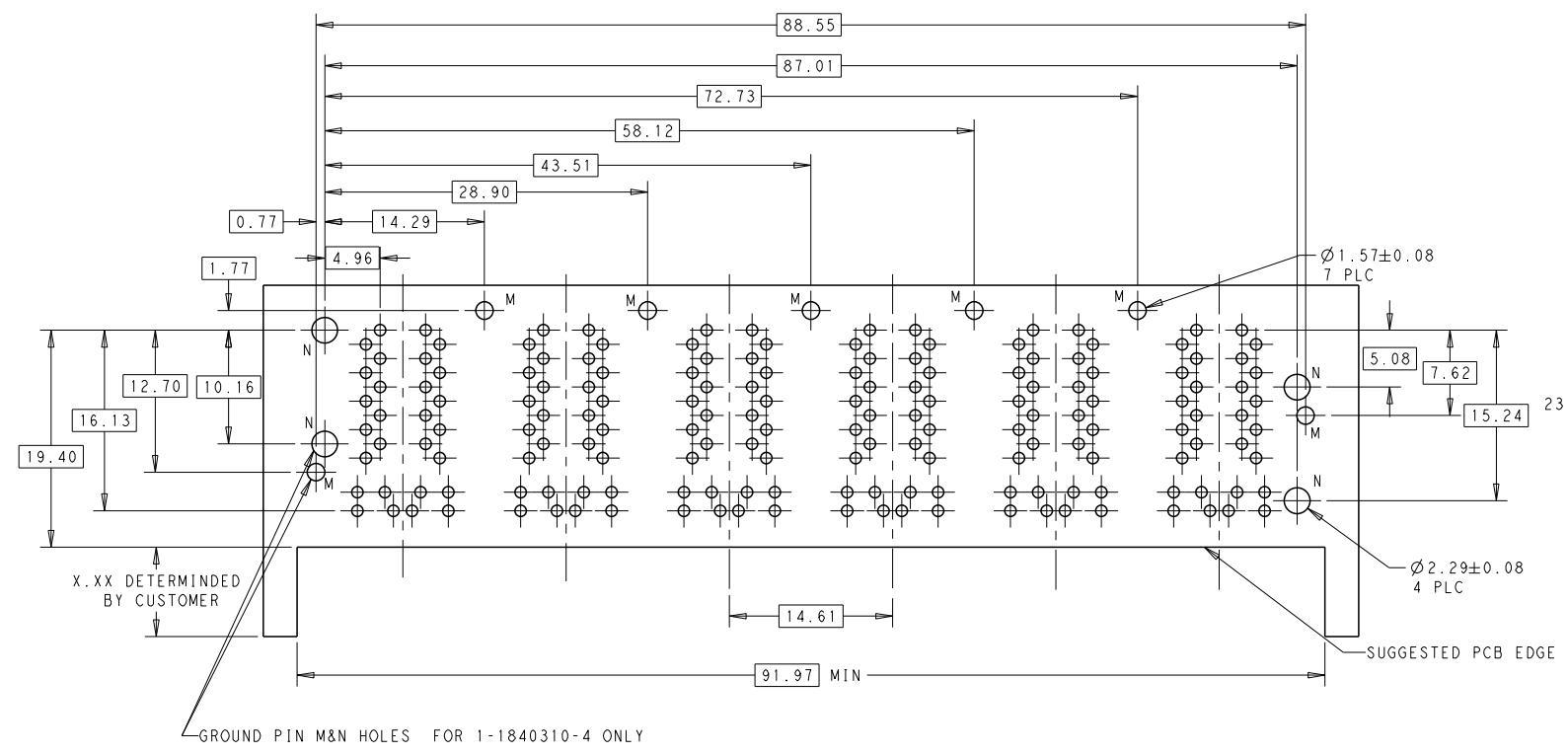
9. THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 265 °C MAX. 10 SECONDS MAX. IT IS RECOMMENDED THAT THE CONNECTOR SHIELD AND BODY BE MASKED TO PROTECT IT FROM DIRECT EXPOSURE TO THE SOLDER WAVE TO AVOID DAMAGE TO THE CONNECTOR AND LEADS.

WITH	YELLOW/GREEN	YELLOW/GREEN	YELLOW/GREEN	YELLOW/GREEN	1-1840310-4
WITHOUT	YELLOW/GREEN	YELLOW/GREEN	YELLOW/GREEN	YELLOW/GREEN	1840310-4
GROUND PINS M&N	TOP LEFT LED	TOP RIGHT LED	BOTTOM LEFT LED	BOTTOM RIGHT LED	PART NO.

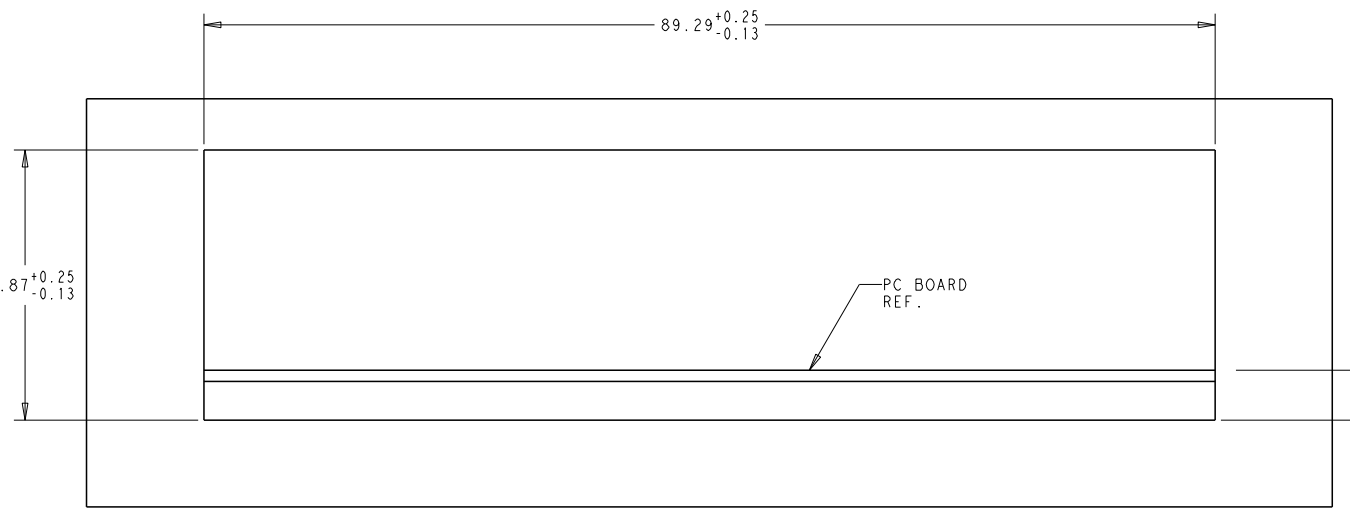
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN DALE PAN 30JUL2008	 TRP CONNECTOR a bel group DONGGUAN CHINA
DIMENSIONS: mm		CHK KEITH ZHU 30JUL2008	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±		APVD TEDDY XIANG 30JUL2008	
PRODUCT SPEC 108-104004	APPLICATION SPEC -	MODEL NAME MAGJACK	DESC 2X6 S8G31 GIGABIT OFFSET W/ LED
		SIZE A1	RESTRICTED TO
		SCALE 3:1	SHEET 1 OF 4 REV G



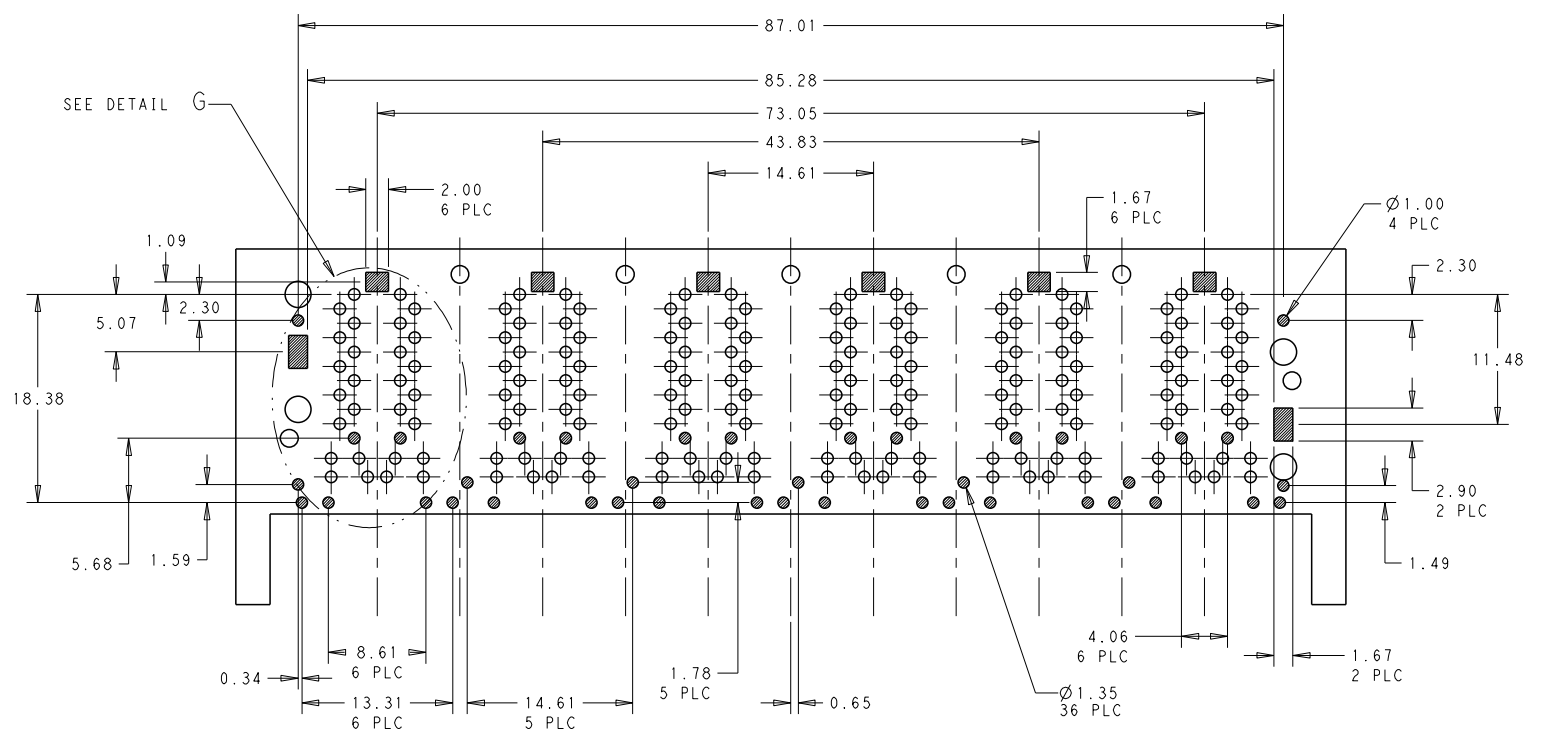
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN DALE PAN 30JUL2008	 DONGGUAN CHINA
DIMENSIONS: mm		CHK KEITH ZHU 30JUL2008	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPD TEDDY XIONG 30JUL2008	
0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±	PRODUCT SPEC 108-104004 APPLICATION SPEC -	MODEL NAME MAGJACK STACK NON-PoE	DESC 2X6 S8G31 GIGABIT OFFSET W/ LED SIZE CAGE CODE DRAWING NO RESTRICTED TO A1 108-104004 SCALE 4:1 SHEET 2 OF 4 REV G



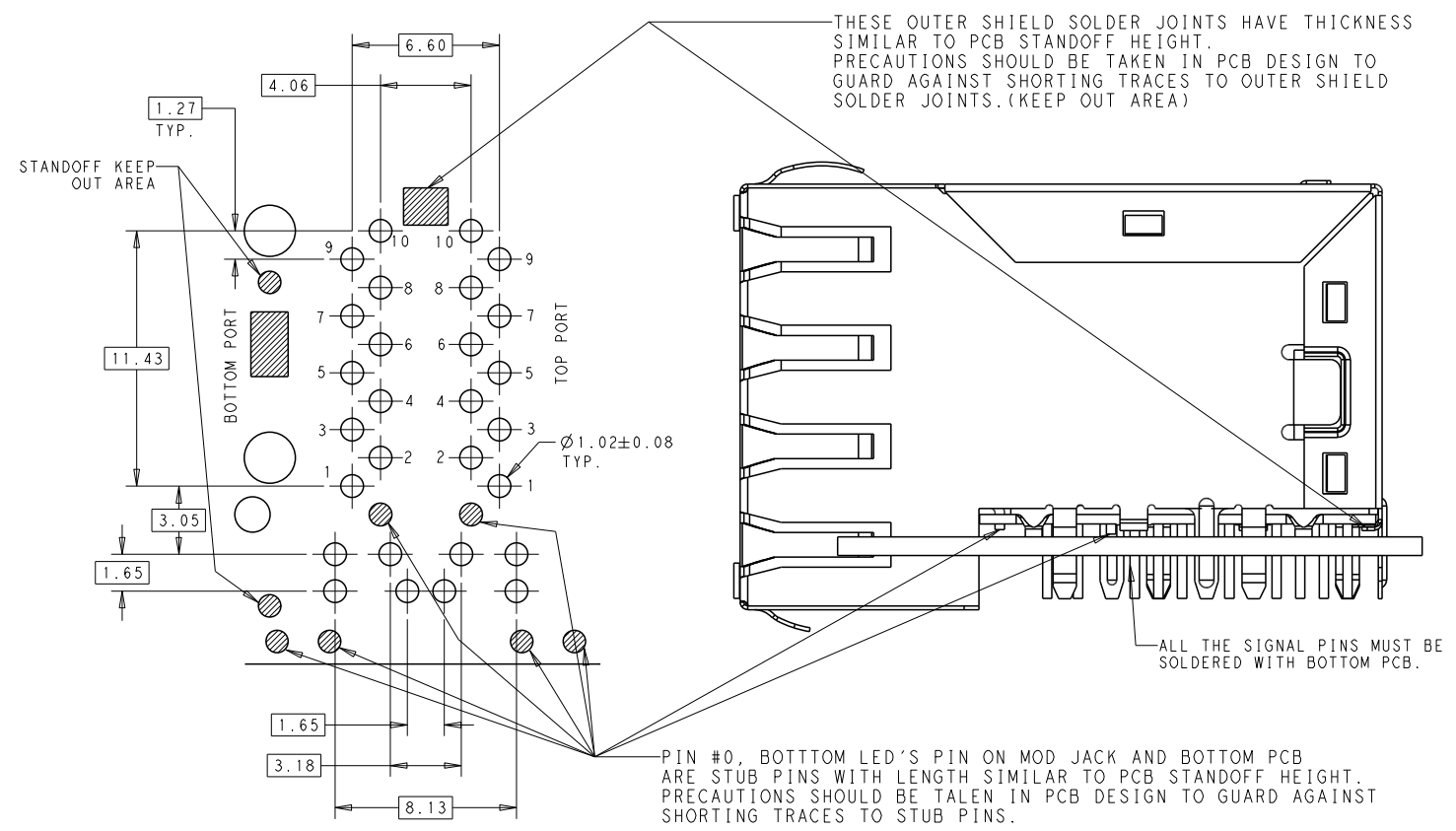
RECOMMENDED PC BOARD LAYOUT
 VIEWED FROM COMPONENT SIDE



RECOMMENDED PANEL CUT-OUT

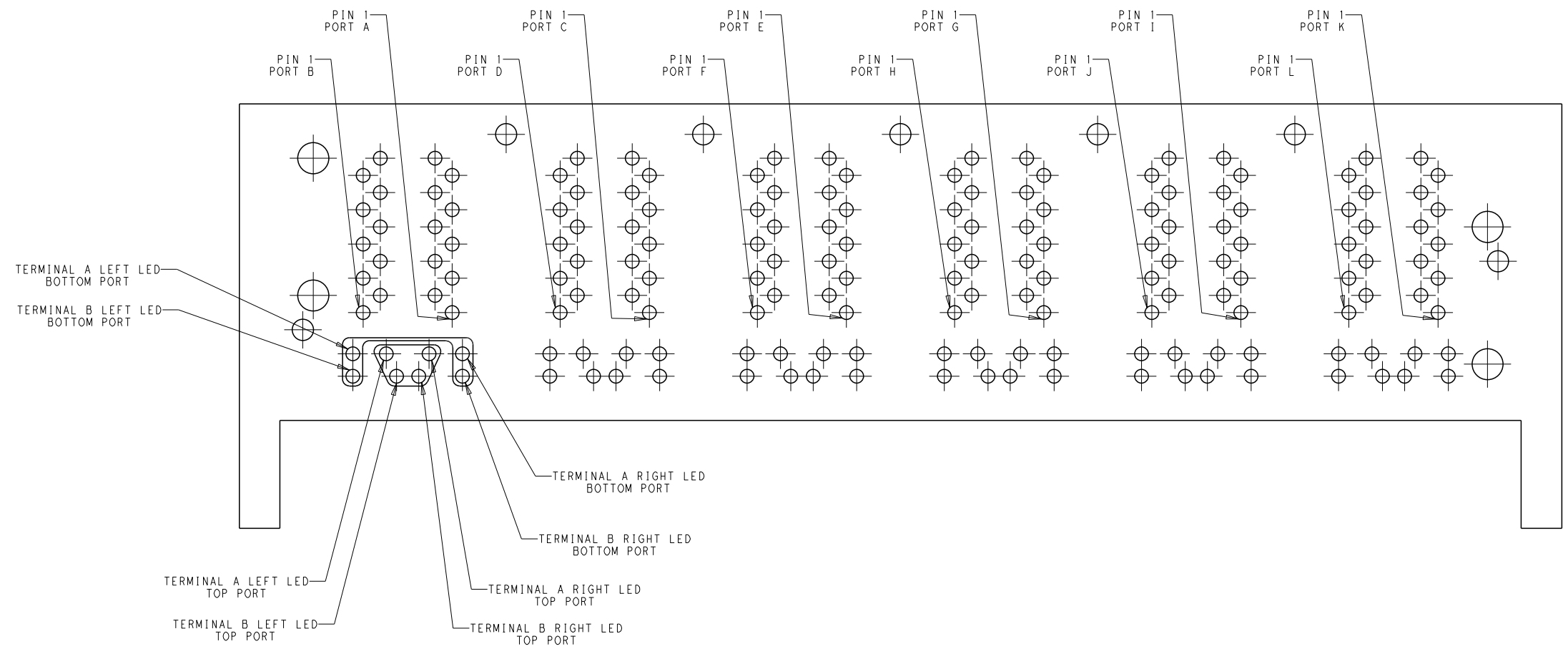


RECOMMENDED PC BOARD LAYOUT
 VIEWED FROM COMPONENT SIDE



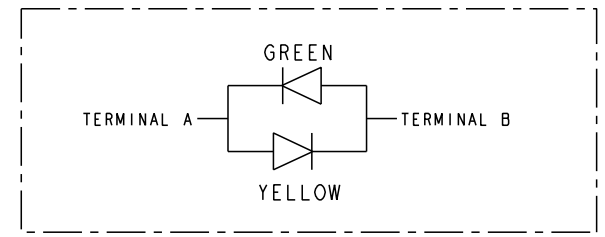
DETAIL G
 SCALE 6:1


THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN DALE PAN 30JUL2008	 TRP CONNECTOR a bel group	DONGGUAN CHINA	
DIMENSIONS: mm		CHK KEITH ZHU 30JUL2008		DESC 2X6 S8G31 GIGABIT OFFSET W/ LED	RESTRICTED TO
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPD TEDDY XIONG 30JUL2008		SIZE A1	CAGE CODE DRAWING NO
0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±		MODEL NAME	SCALE 3:1	SHEET 3 OF 4	
PRODUCT SPEC 108-104004		APPLICATION SPEC	C=1840310	REV G	
CUSTOMER DRAWING					



LED HOLE DESIGNATIONS VIEWED FROM COMPONENT SIDE
 SCALE 5:1

BI COLOR LED



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN DALE PAN 30JUL2008	 DONGGUAN CHINA
DIMENSIONS: mm		CHK KEITH ZHU 30JUL2008	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±		APPVJ TEDDY XIANG 30JUL2008	
PRODUCT SPEC 108-104004	APPLICATION SPEC -	MODEL NAME MAGJACK	DESC 2X6 S8G31 GIGABIT OFFSET W/ LED
		SIZE A1	CAGE CODE DRAWING NO 1840310
		CUSTOMER DRAWING	RESTRICTED TO -
		SCALE 3:1	SHEET 4 OF 4 REV G