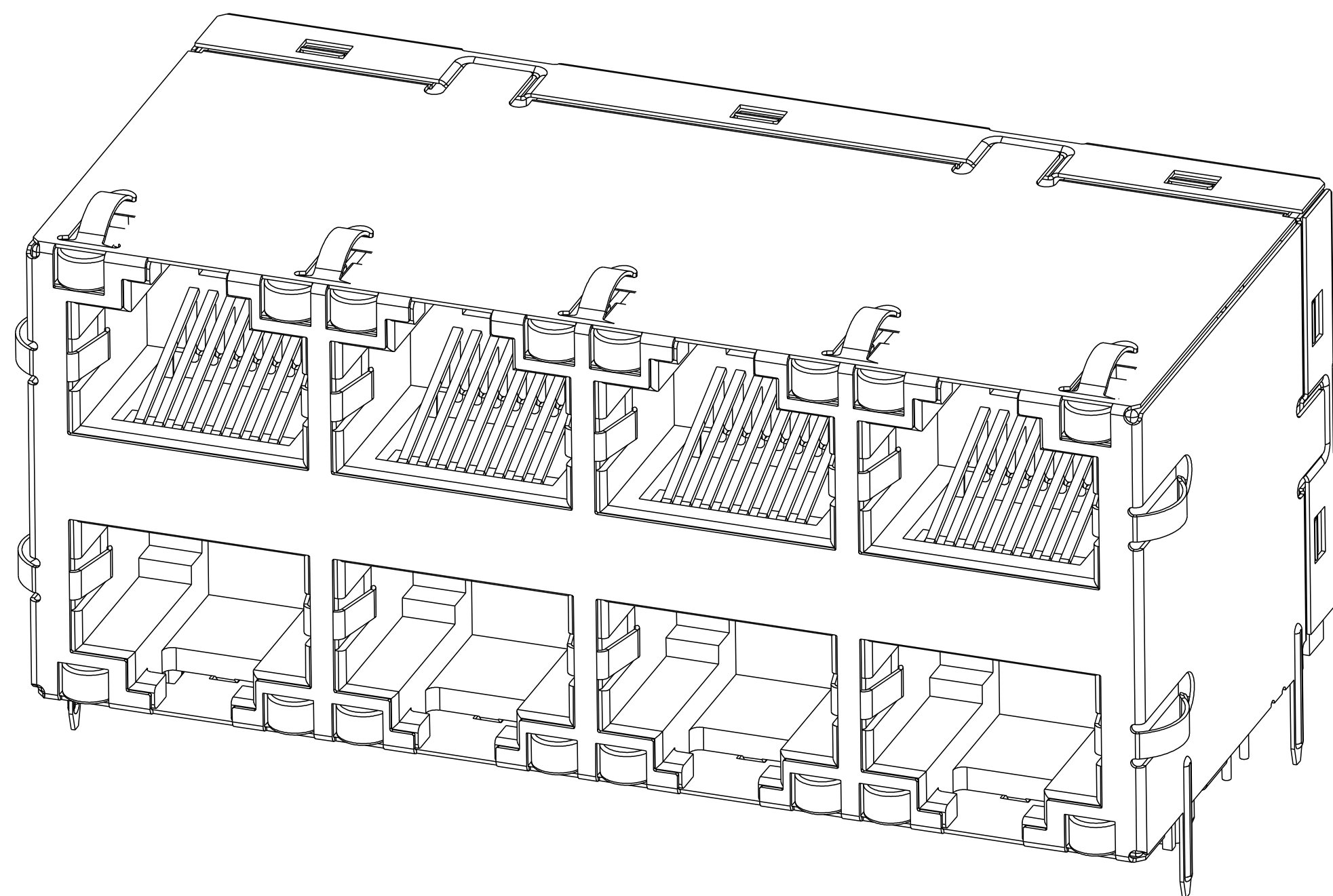


THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

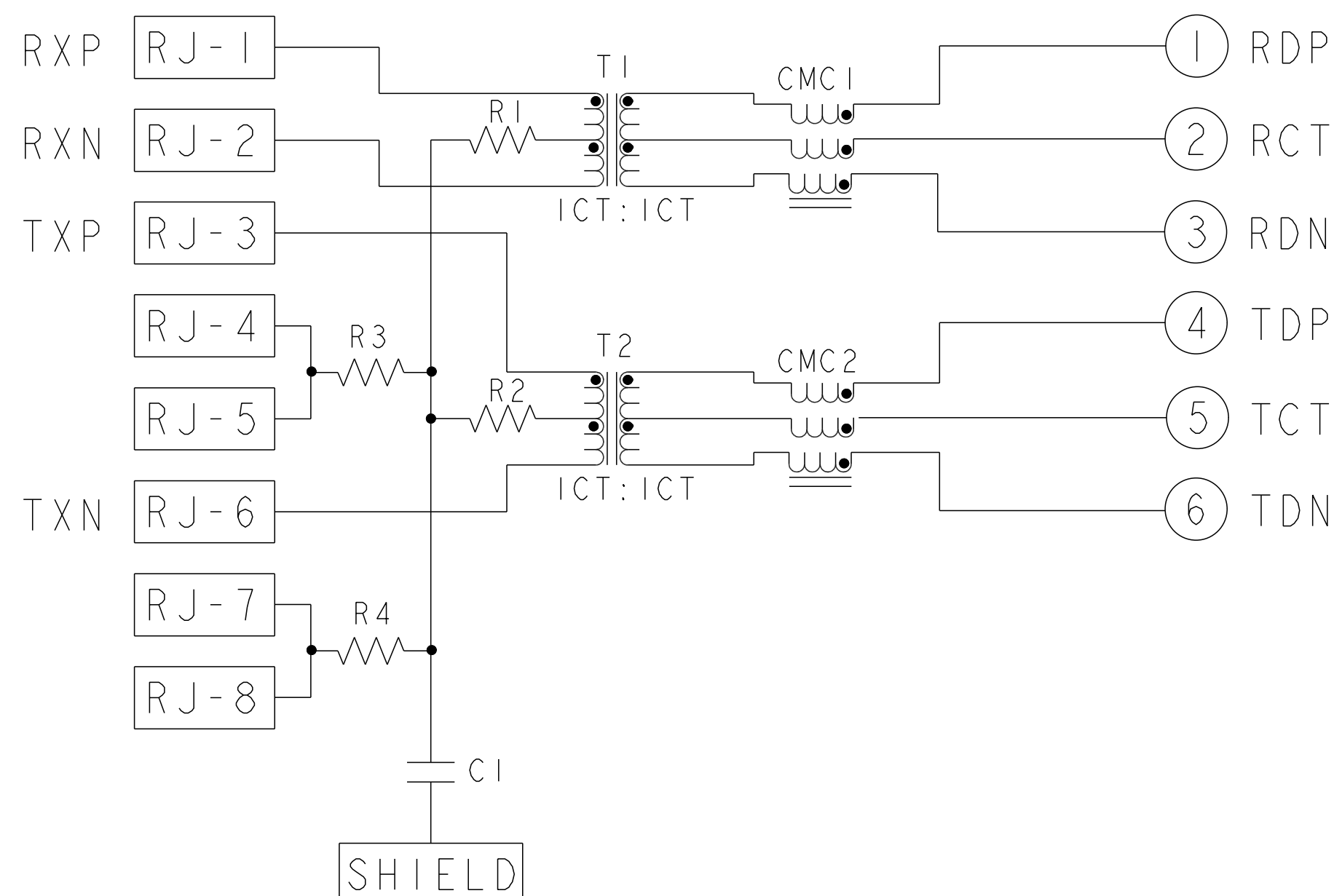
PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:
 5736910 5939955 6425781 6428361 6554638 6840817 7123117
 7429195 7717749 7808751 6217391 6149050 7924130

REVISIONS				
P	LTR	DESCRIPTION	DATE	DRW APVD
E		EC-1411035 COMPANY LOGO CHANGE	18DEC2014	GZ TY



S8137 10/100 BASE-T CIRCUIT

TOP AND BOTTOM PORTS



R1 - R4 = 75 Ohms, RESISTORS
 C1 = 1000pF, 3kV CAPACITOR

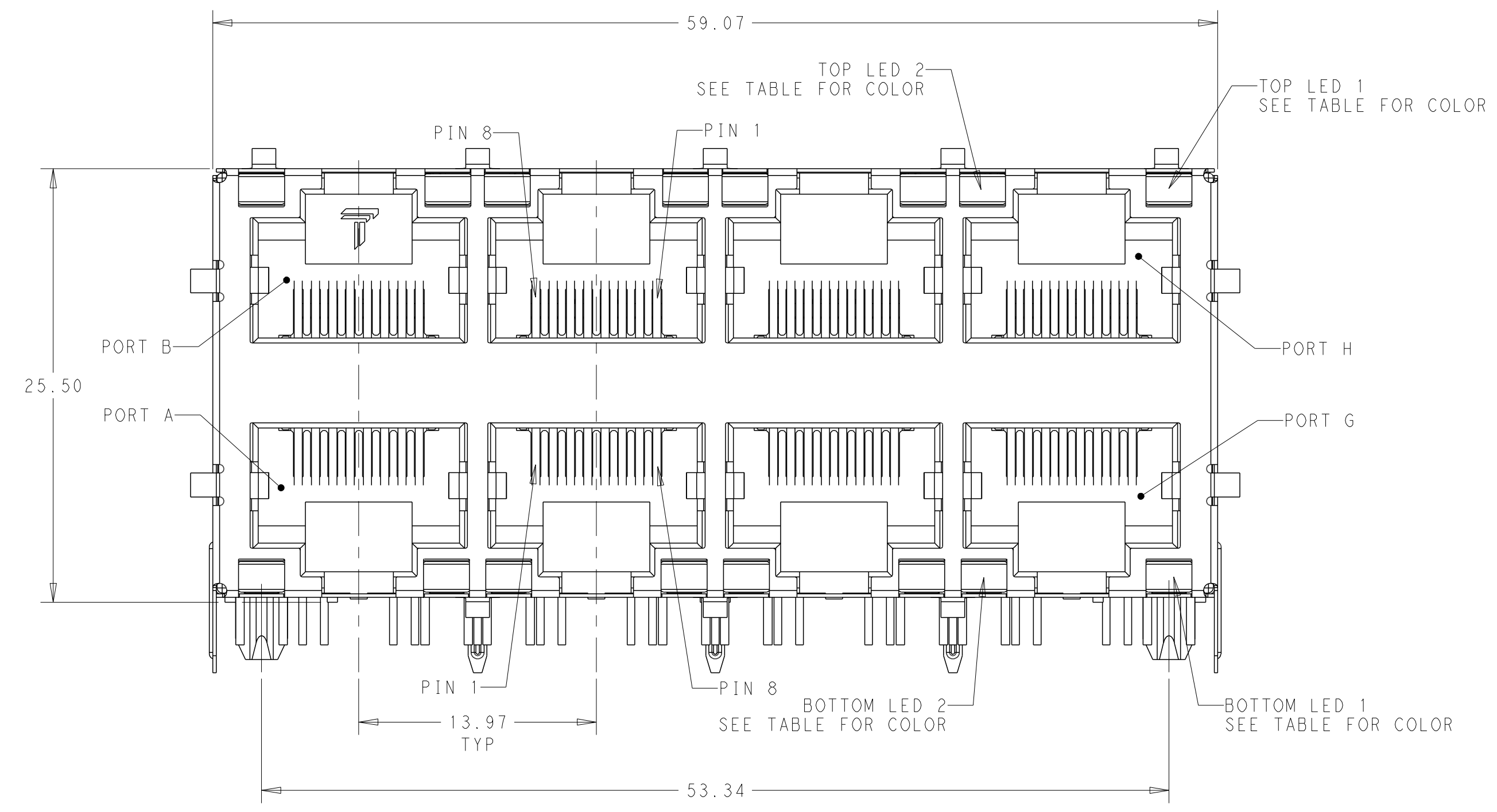
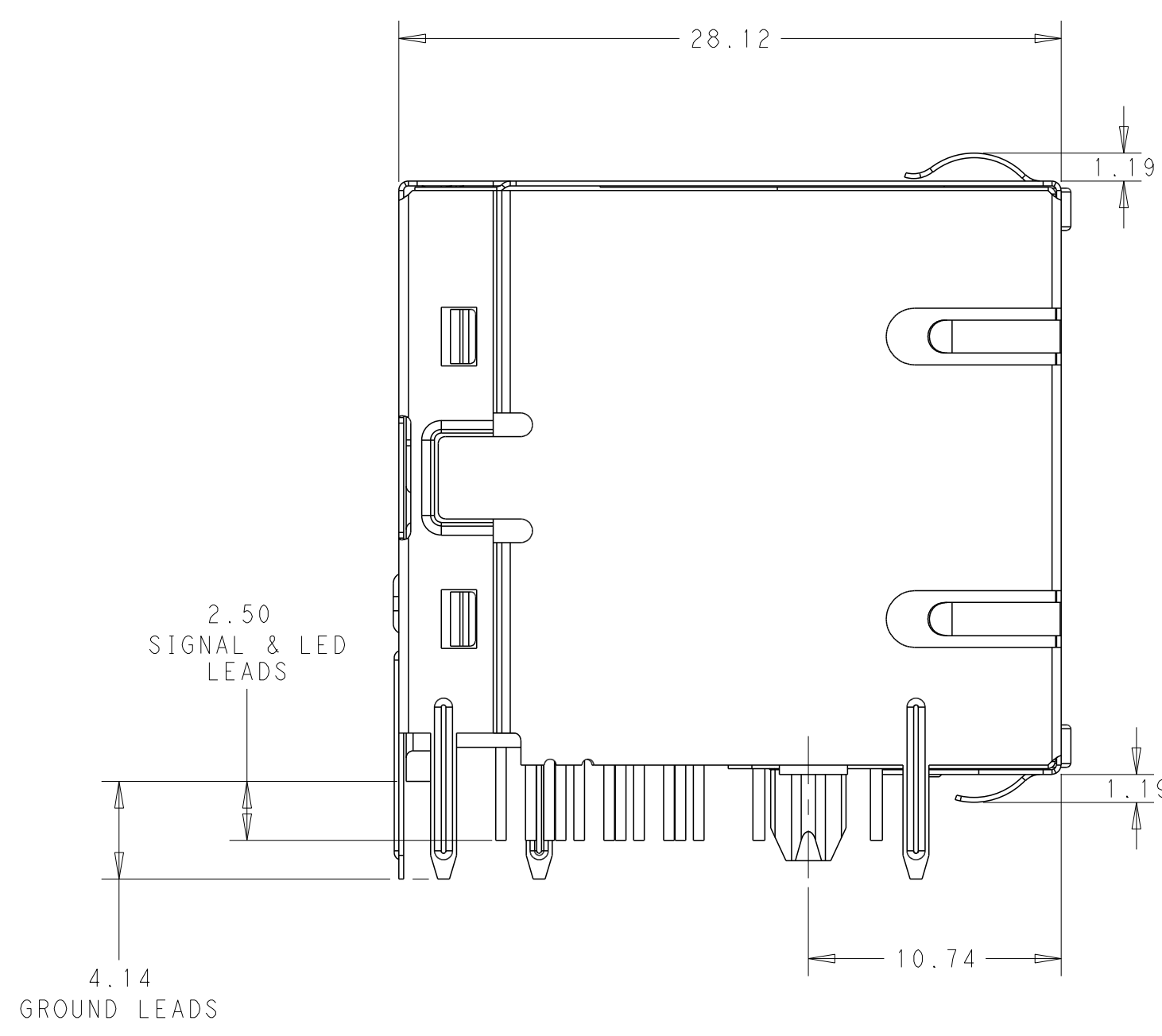
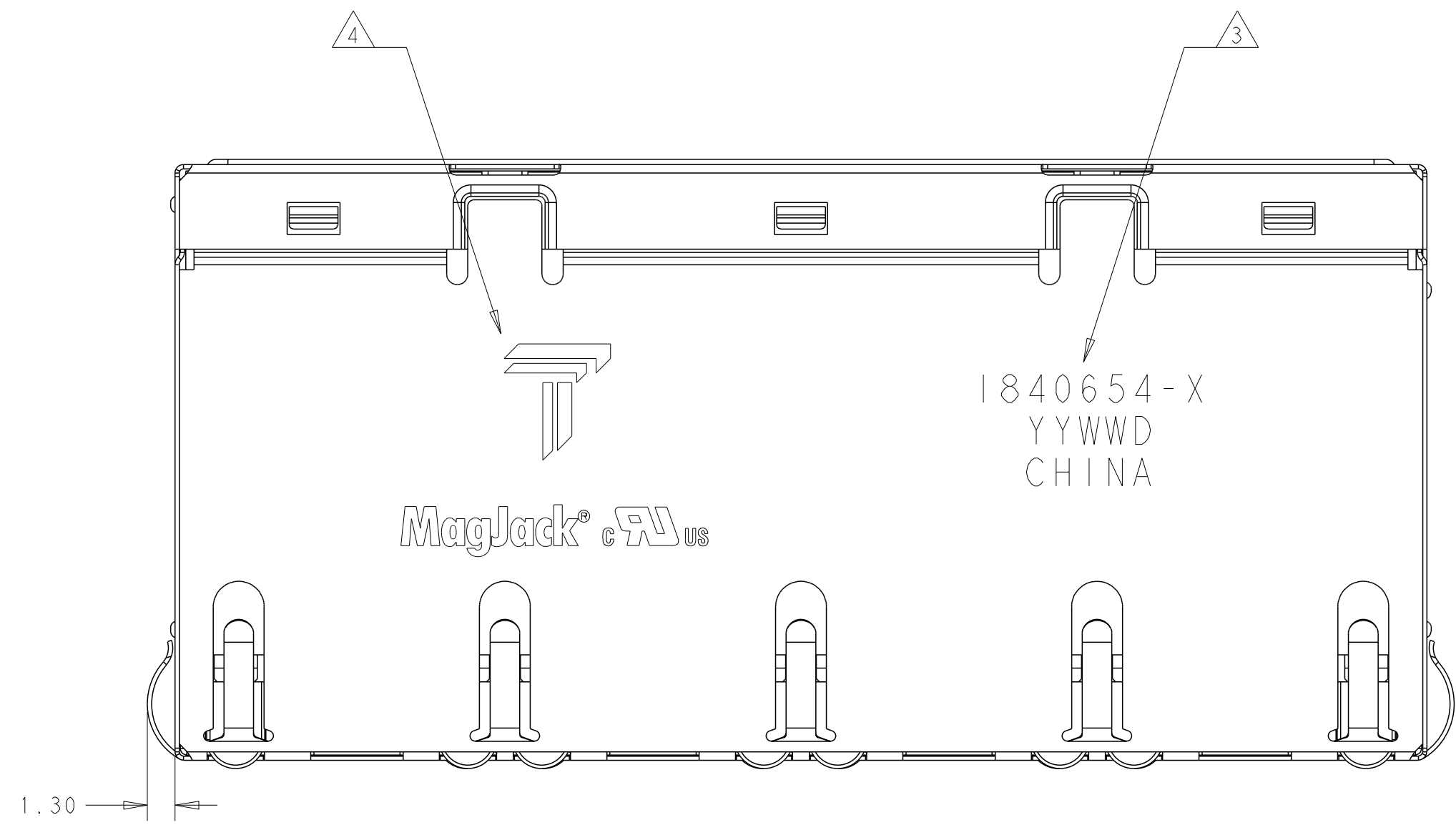
- MATERIALS:
 PLASTIC HOUSING: BLACK, THERMOPLASTIC FLAMMABILITY RATING UL 94V-0
 SHIELD: BRASS, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL,
 POST DIPPED WITH 2.54um MIN SAC SOLDER ON SOLDER TAILS,
 CONTACTS: PHOSPHOR BRONZE, 1.27um MIN OVERALL NICKEL UNDERPLATE,
 WITH SELECT 1.27um MIN GOLD AT MATING INTERFACE AND 2.54um MIN
 MATTE TIN ON SOLDER TAILS.
 LED: DIFFUSED EPOXY LENS, CARBON STEEL LEAD FRAME TAILS OF LED
 ARE PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL
 UNDERPLATE OVER 1.02um MIN COPPER UNDERPLATE. POST-PLATED WITH
 2.54um MIN MATTE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP

- MAGNETICS
 APPLICATION: 10/100 BASE-T
 IMPEDANCE: 100 OHMS
 TURNS RATIO (CHIP:CABLE): TX = 1:1, RX = 1:1
 OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS,
 .8mADC BIAS FROM 0°C TO 70°C, TX AND RX
 PERFORMANCE @ 25°C:
 INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
 RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 30MHz
 18-20LOG(f/30)dB MIN FROM 30.1MHz TO 60MHz
 12dB MIN FROM 60.1MHz TO 80MHz
 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.

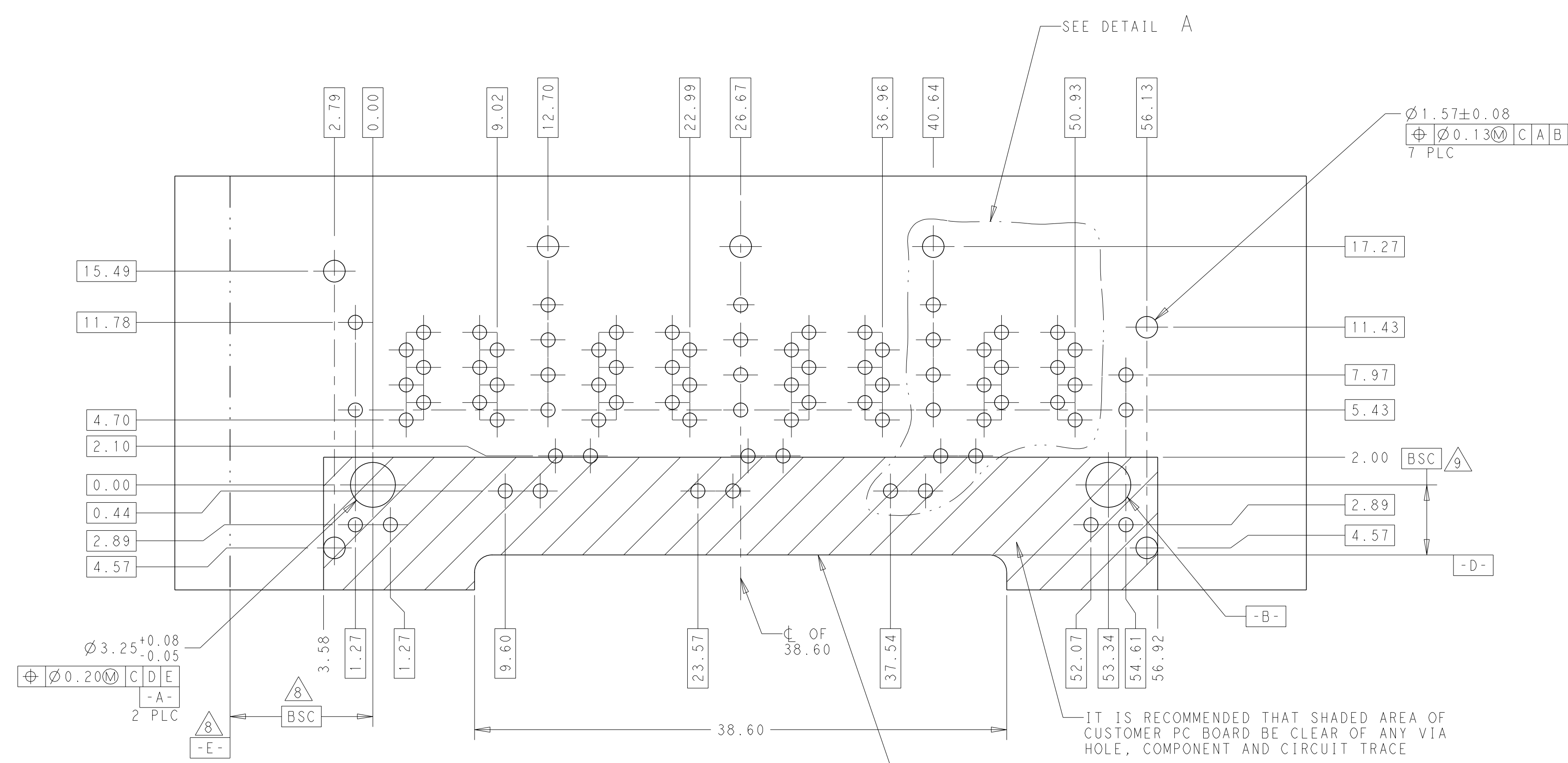
- PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN APPROXIMATE AREA SHOWN.
- TRP CONNECTOR LOGO AND AGENCY APPROVAL LOGO ARE LOCATED IN APPROXIMATE AREA SHOWN.
- OPERATING TEMP: FROM 0°C TO +70°C.
- RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.
- INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.
- DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.
- BASIC DIMENSION ESTABLISHED BY CUSTOMER, BUT MAY NOT BE GREATER THAN 5.08mm.
- LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA
 LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP. @ IF=20mA
 FORWARD VOLTAGE (VF): GREEN 2.2V TYP. @ IF=20mA
- THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS,
 PEAK TEMPERATURE 260°C MAX, 10 SECONDS MAX.

GREEN	GREEN	GREEN	GREEN	1840654-1
BOTTOM LED 2	BOTTOM LED 1	TOP LED 2	TOP LED 1	PART NUMBER

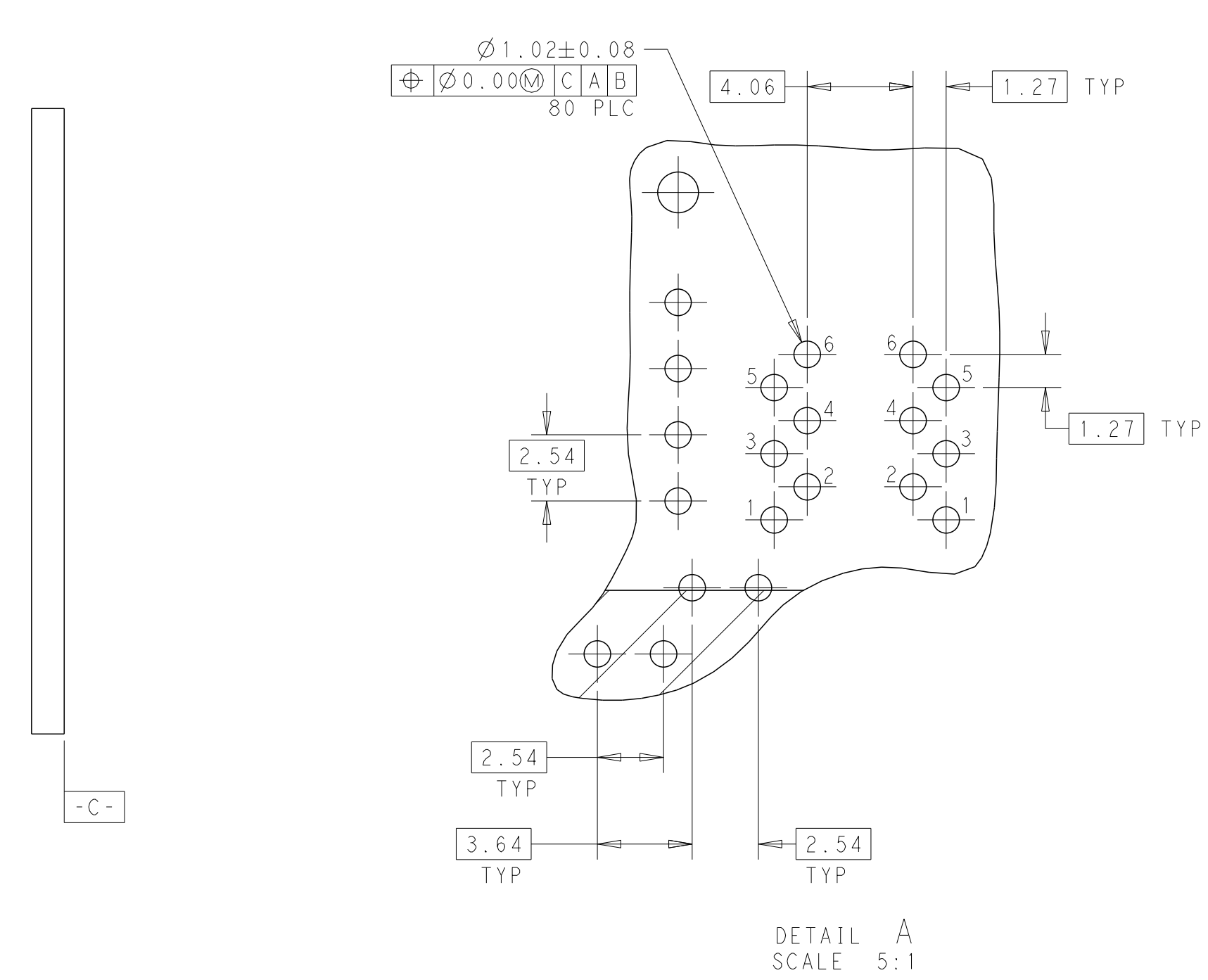
THIS DRAWING IS A CONTROLLED DOCUMENT.		DRW: TOMMY REN/EVAN MA 13OCT2011	 trp CONNECTOR a bel group DONGGUAN CHINA
DIMENSIONS: mm		CHK: TONY YUAN 13OCT2011	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: KEITH ZHU 13OCT2011	DESC: 2X4 S8137 10/100 W/ LED
0 PLC ±0.25	1 PLC ±0.25	2 PLC ±0.25	3 PLC ±
4 PLC ±	ANGLES ±	PRODUCT SPEC 108-104004	APPLICATION SPEC -
MAGJACK STACK Non-PoE		SIZE: A1	CAGE CODE: 1840654
CUSTOMER DRAWING		SCALE: 4:1	SHEET 1 OF 4 REV E



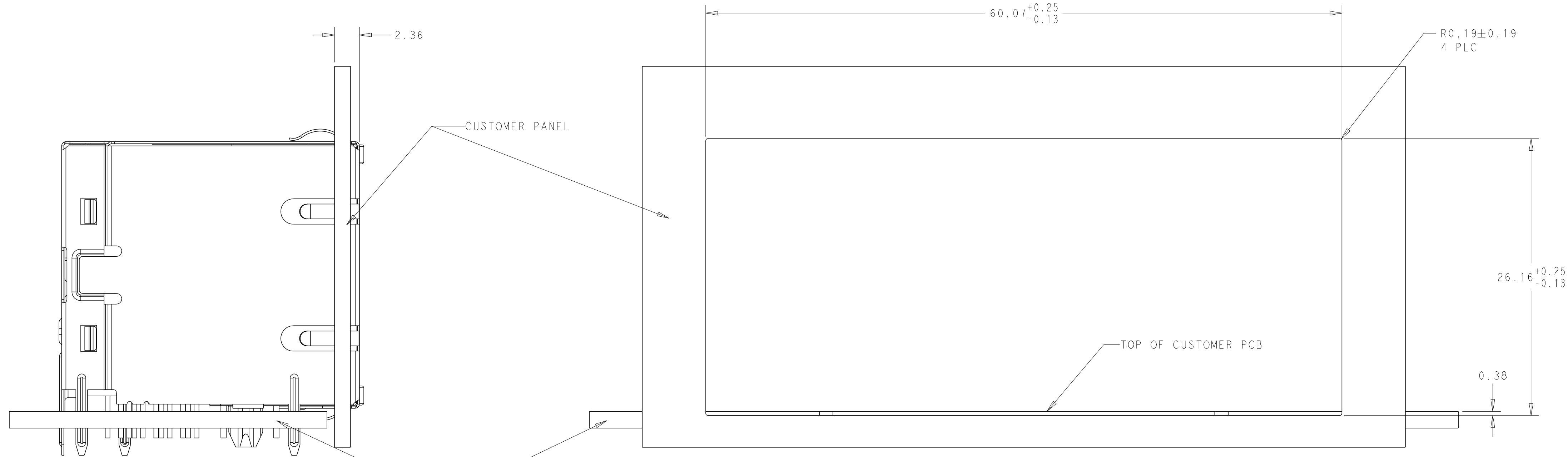
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: TOMMY REN/EVAN MA 13OCT2011 CHK: TONY YUAN 13OCT2011 APVD: KEITH ZHU 13OCT2011 MODEL NAME: MAGJACK DESC: STACK Non-PoE	TRP CONNECTOR a bel group DONGGUAN CHINA
DIMENSIONS: mm 	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ± ANGLES ± APPLICATION SPEC ±	DESC: 2X4 S8137 10/100 W/ LED SIZE: A1 CAGE CODE: C=1840654 DRAWING NO: 108-104004 RESTRICTED TO: CUSTOMER DRAWING	
PRODUCT SPEC: 108-104004	SCALE: 4:1 SHEET: 2 OF 4 REV: E		



RECOMMENDED PCB LAYOUT COMPONENT SIDE VIEW
 RECOMMENDED PCB FRONT EDGE CUTOUT: THE BOTTOM SHIELD GROUND TABS(FRONT) SHOULD NOT BE SEATED ON THE TOP OF THE PCB



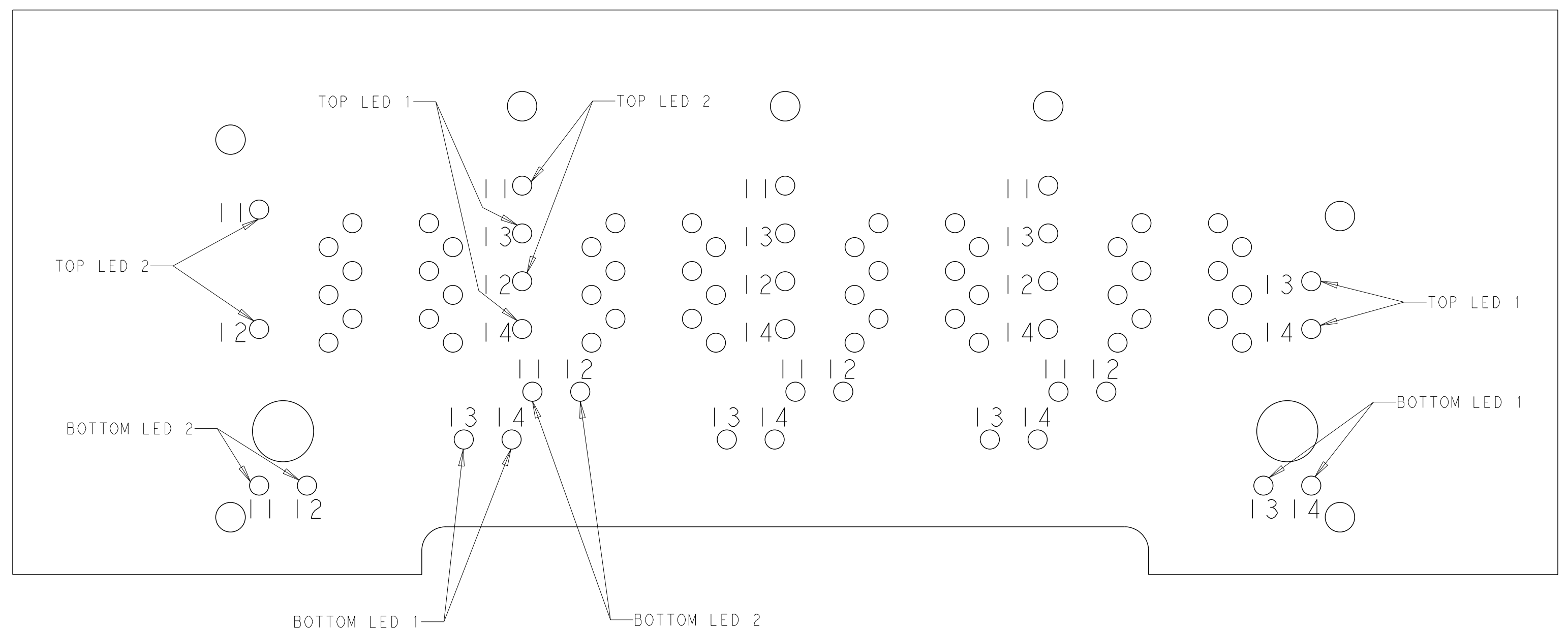
DETAIL A SCALE 5:1



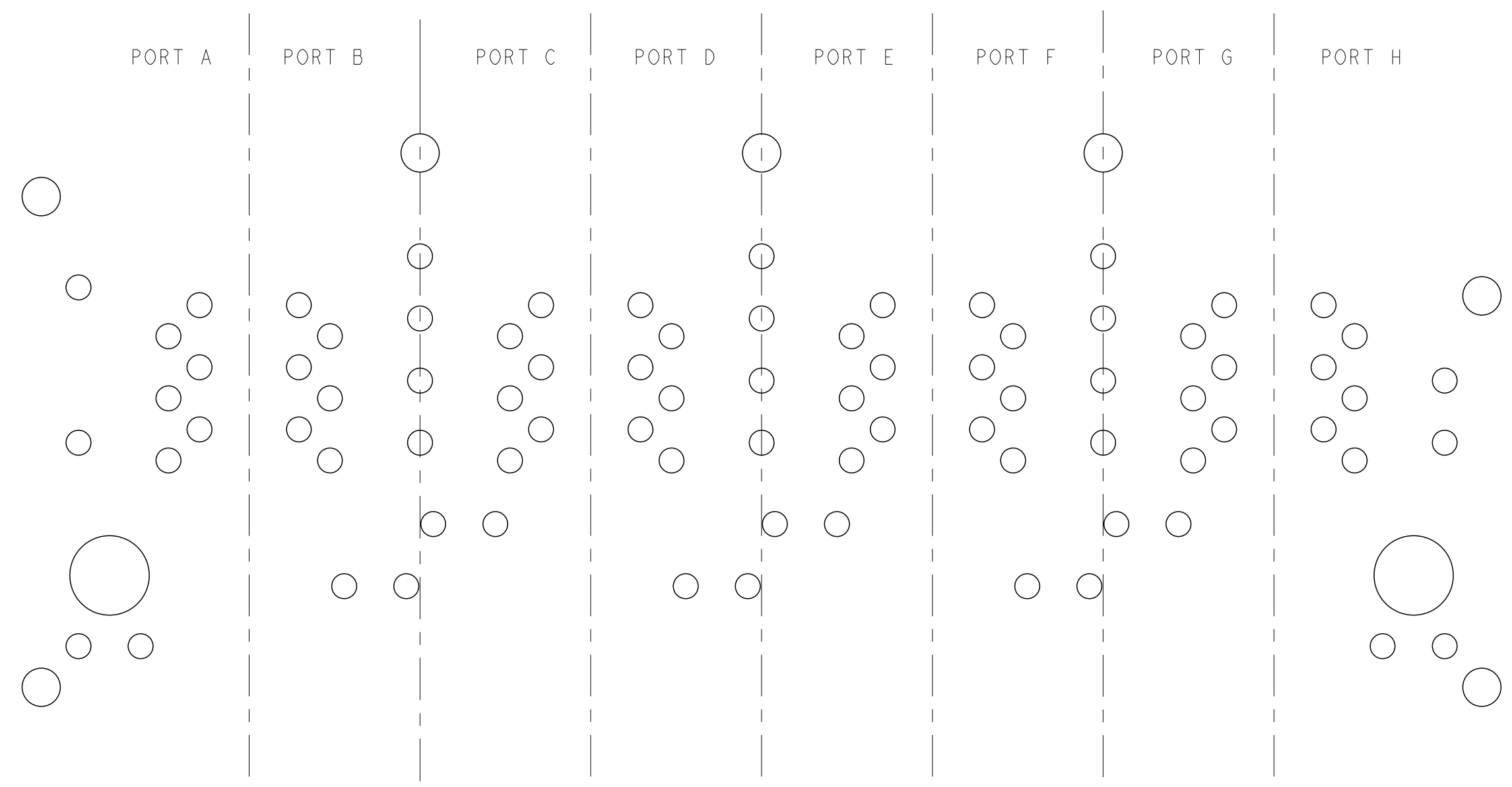
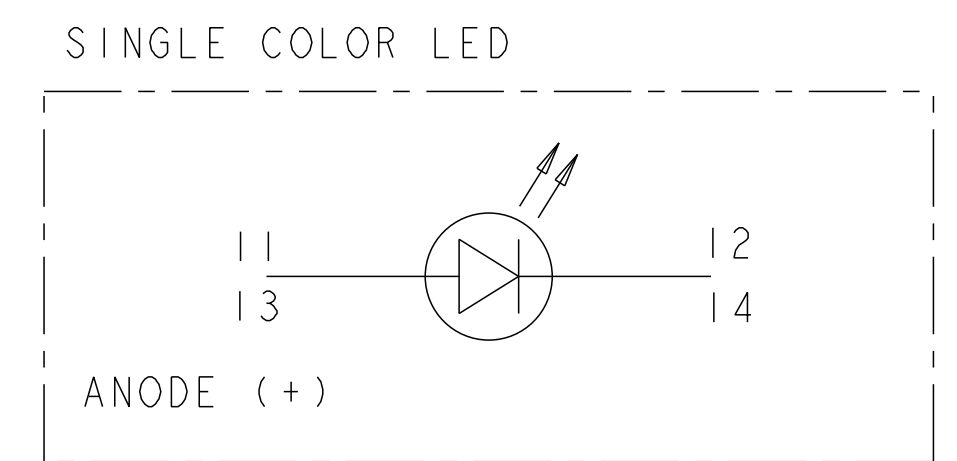
SHOWN WITH PANEL AND CUSTOMER PCB ASSEMBLY

SUGGESTED PANEL CUTOUT DIMENSIONS


THIS DRAWING IS A CONTROLLED DOCUMENT.		DWG: TOMMY REN/EVANY MA 13OCT2011		DONGGUAN CHINA
DIMENSIONS: mm		CHK: TONY YUAN 13OCT2011		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPROV: KEITH ZHU 13OCT2011		2X4 S8137 10/100 W/ LED SIZE: A1 CAGE CODE: 1840654
0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ±0.25 ANGLES ±		MODEL NAME: MAGJACK PRODUCT SPEC: STACK Non-PoE APPLICATION SPEC:		
PRODUCT SPEC: 108-104004		CUSTOMER DRAWING		RESTRICTED TO: SCALE: 4:1 SHEET 3 OF 4 REV E



LED HOLE DESIGNATIONS
COMPONENT SIDE VIEW



PORT ASSIGNMENT
COMPONENT SIDE VIEW

THIS DRAWING IS A CONTROLLED DOCUMENT.		DRW: TOMMY REN/EVAN MA 13OCT2011	 DONGGUAN CHINA
		CHK: TONY YUAN 13OCT2011	
DIMENSIONS: mm		APRD: KEITH ZHU 13OCT2011	DESC: 2X4 S8137 10/100 W/ LED
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±°		MODEL NAME: MAGJACK	SIZE: A1
PRODUCT SPEC: 108-104004	APPLICATION SPEC: -	STACK Non-PoE	CAGE CODE: C=1840654 DRAWING NO: RESTRICTED TO:
CUSTOMER DRAWING		SCALE: 4:1	SHEET 4 OF 4 REV E