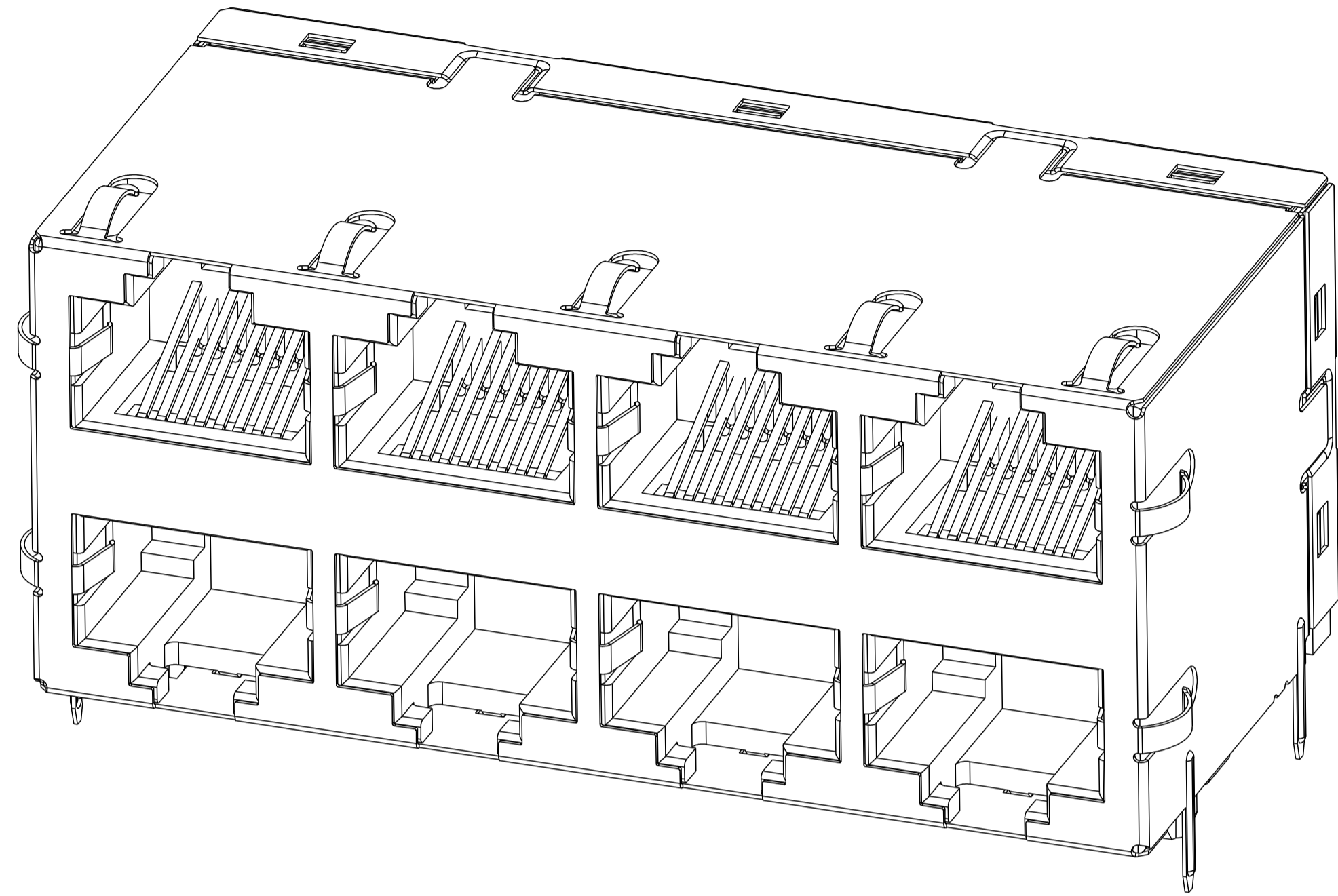


THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

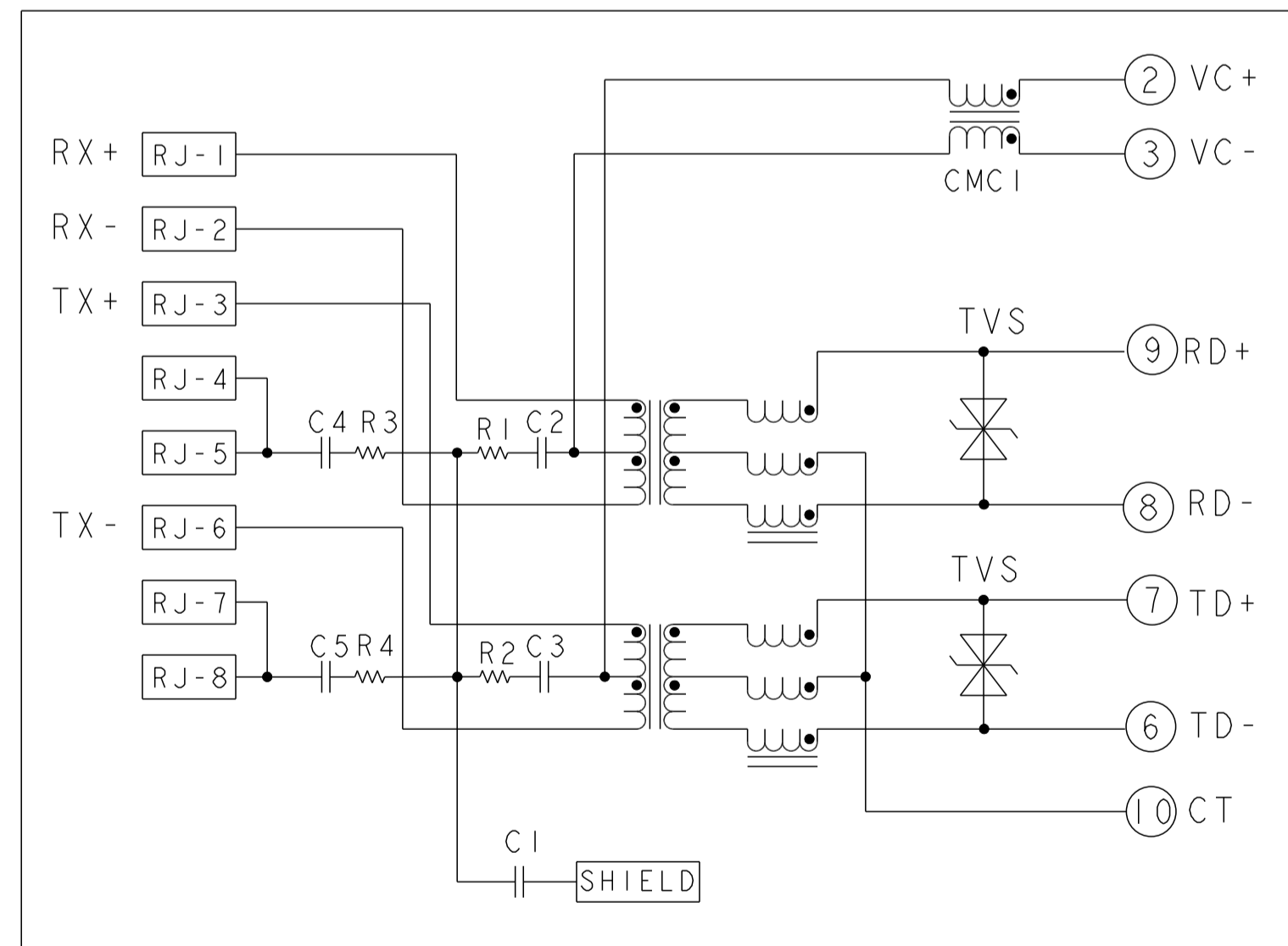
PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:  
 5736910 5939955 6425781 6428361 6554638 6840817 7123117  
 7429195 7717749 7808751 6217391 6149050 7924130

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



S8V90 10/100 BASE-T POE CIRCUIT

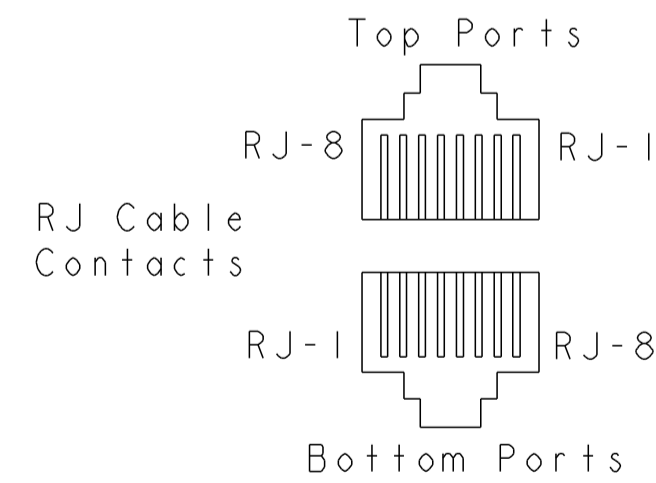
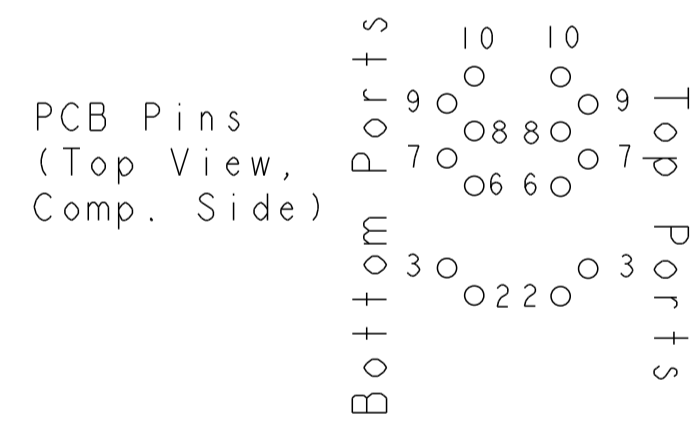
Top and Bottom Ports



C1 = 1000pF, 2kV, ±10%, X7R Decoupling cap  
 C2 - C5 = 0.1uF, 10%, 50V Capacitors  
 R1-R4 = 75 Ohms, 1/16 W, ±5% Resistors

Pin Designations

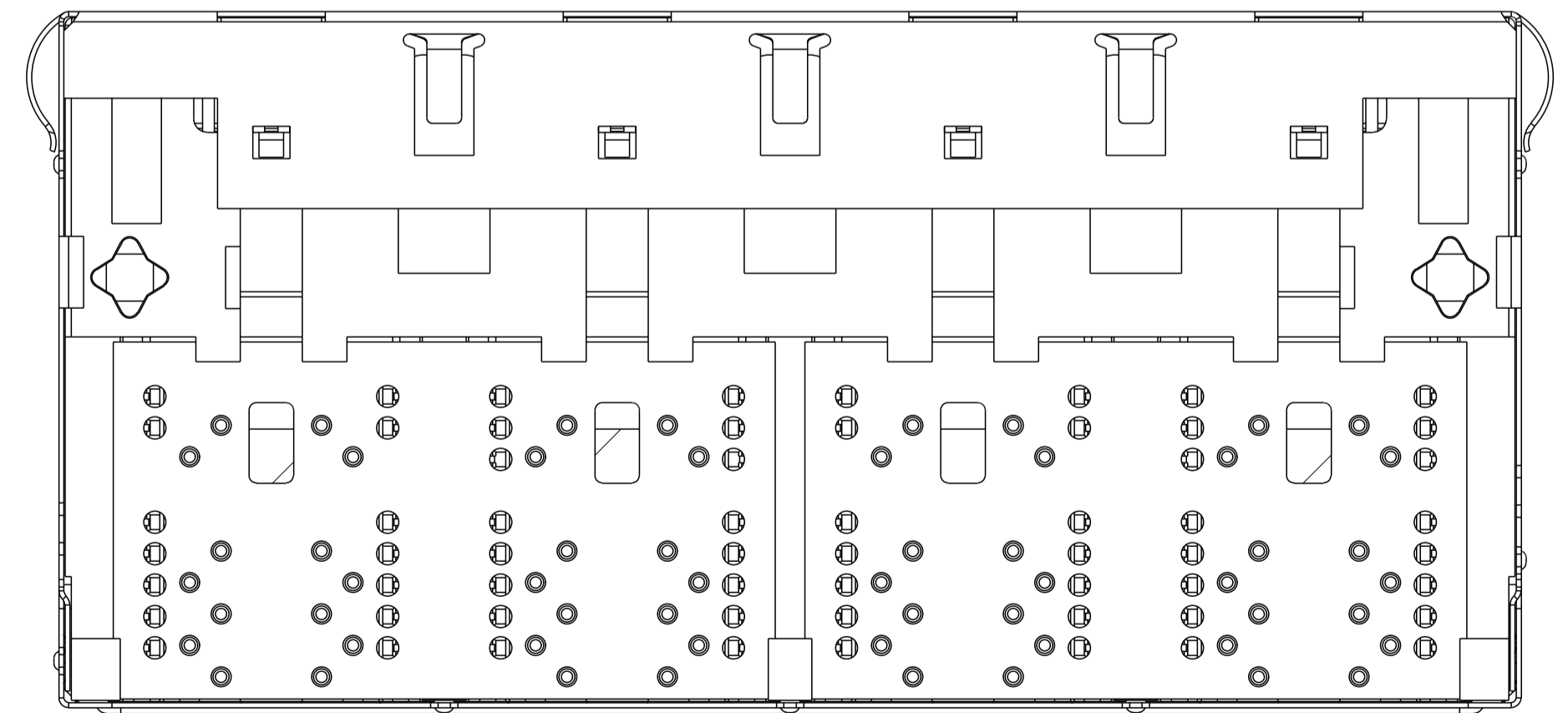
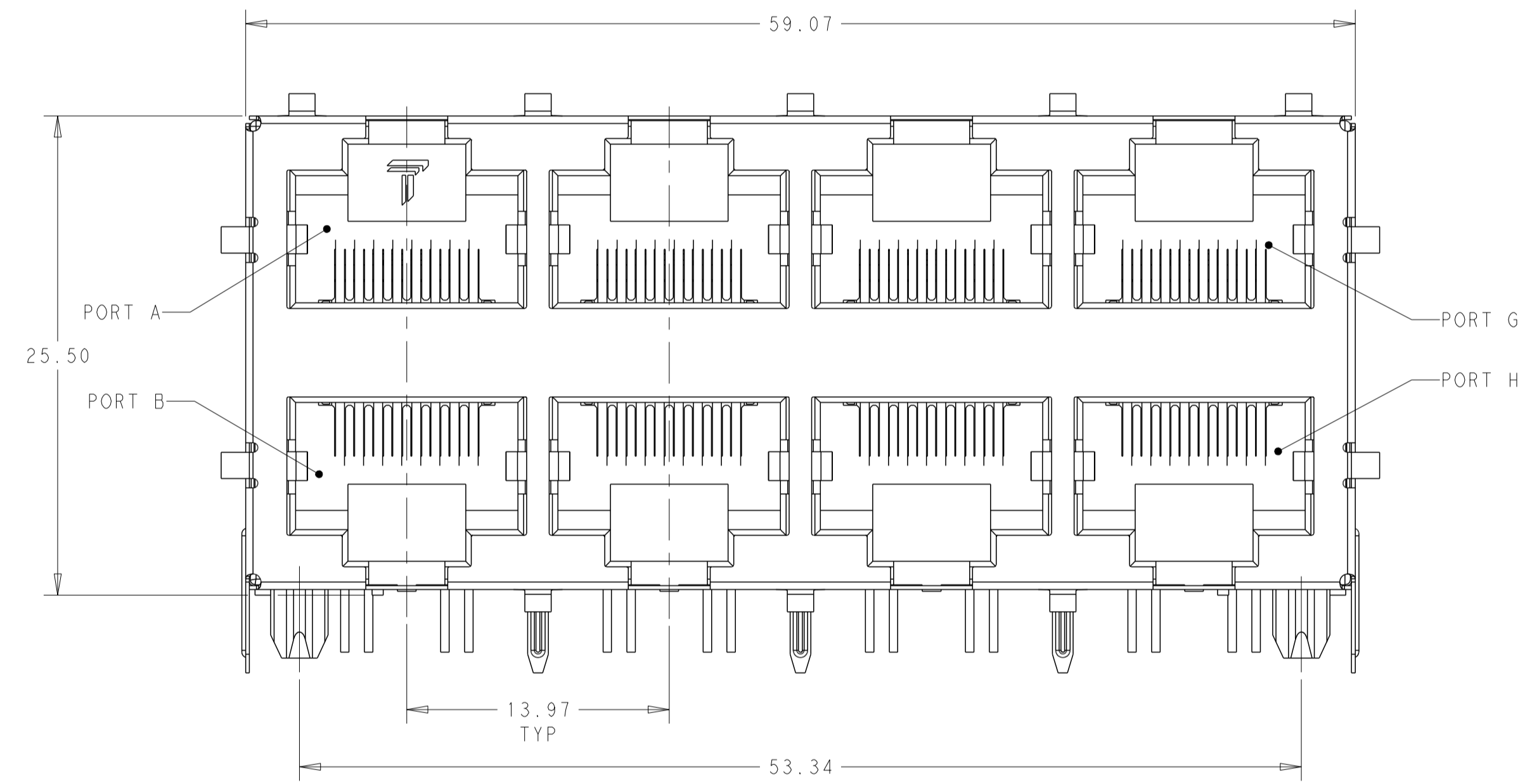
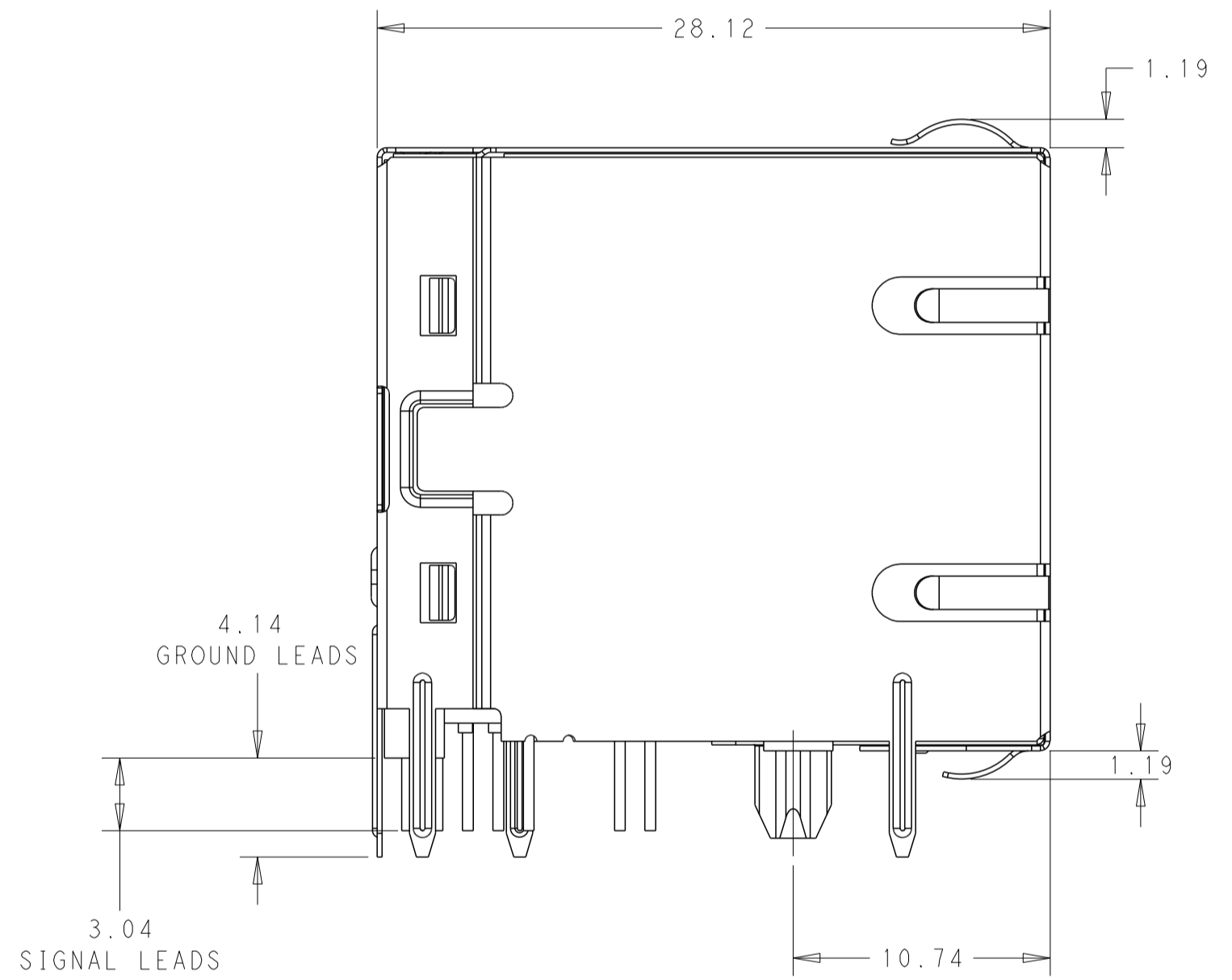
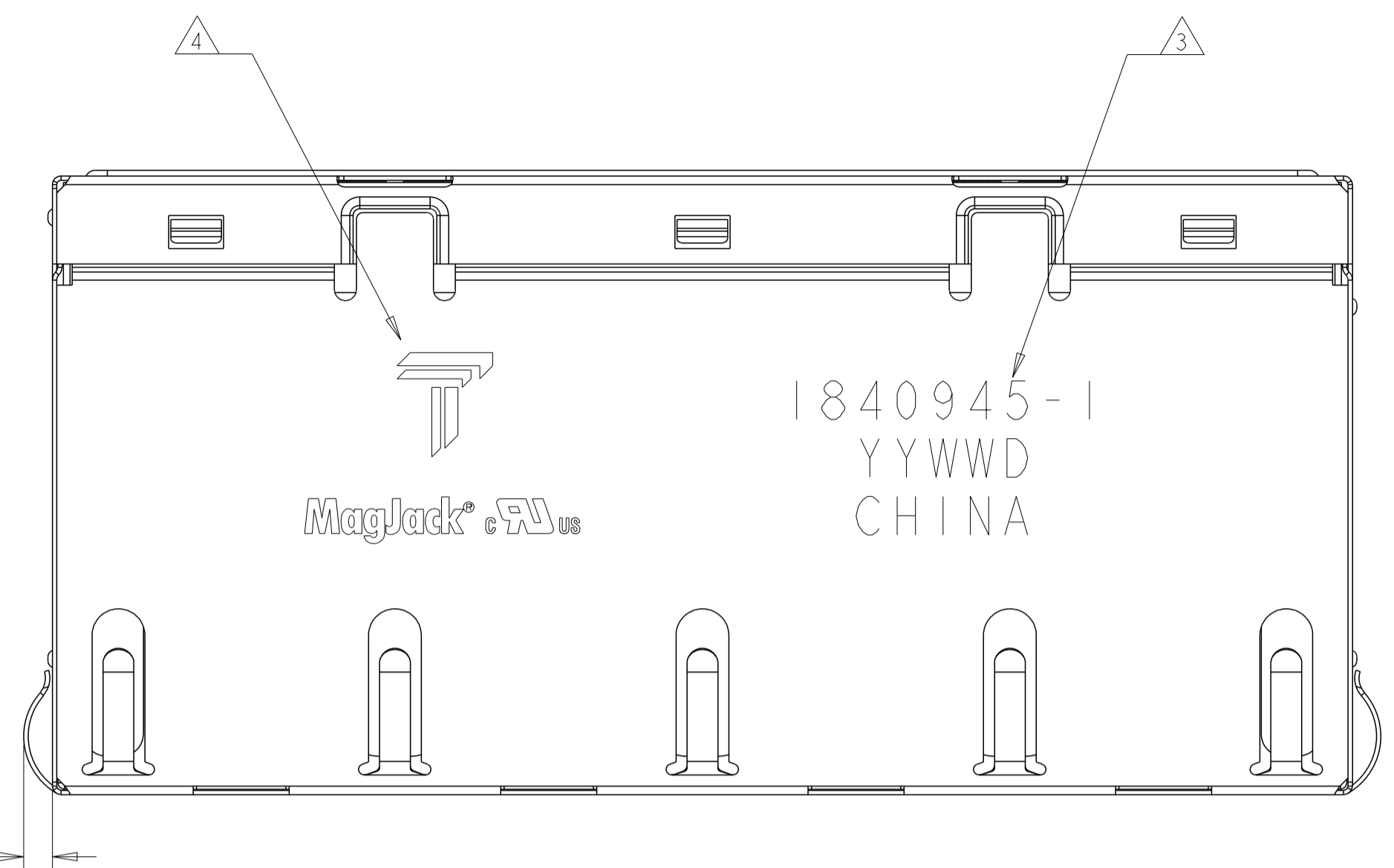
(Repeat for each vertical pair of ports.)



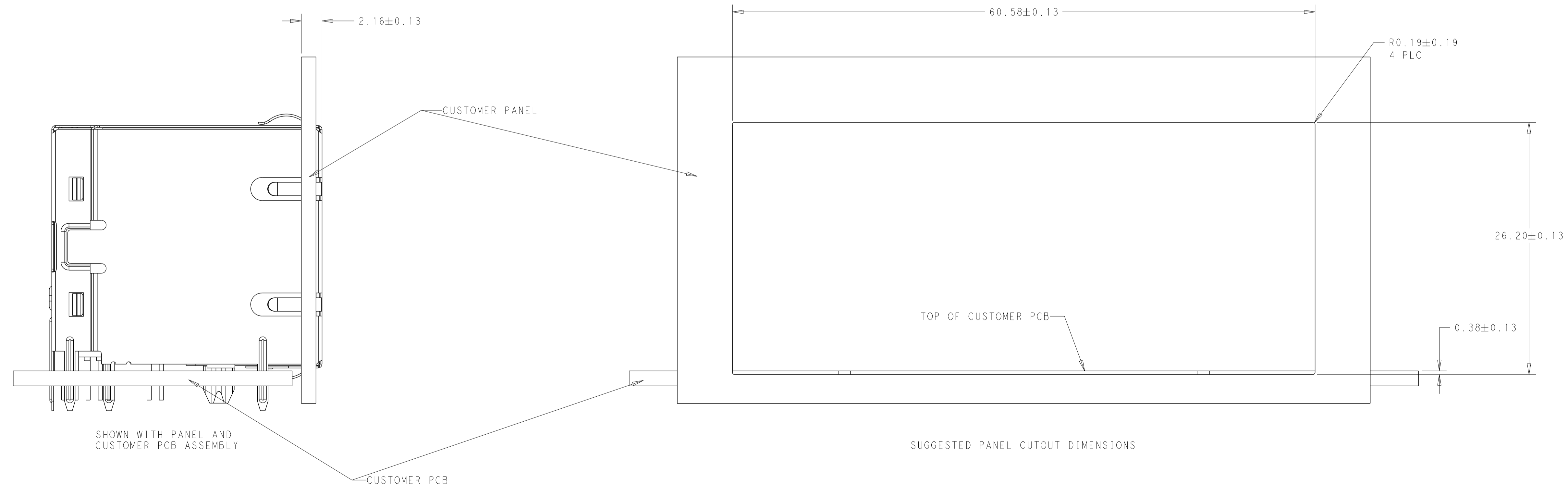
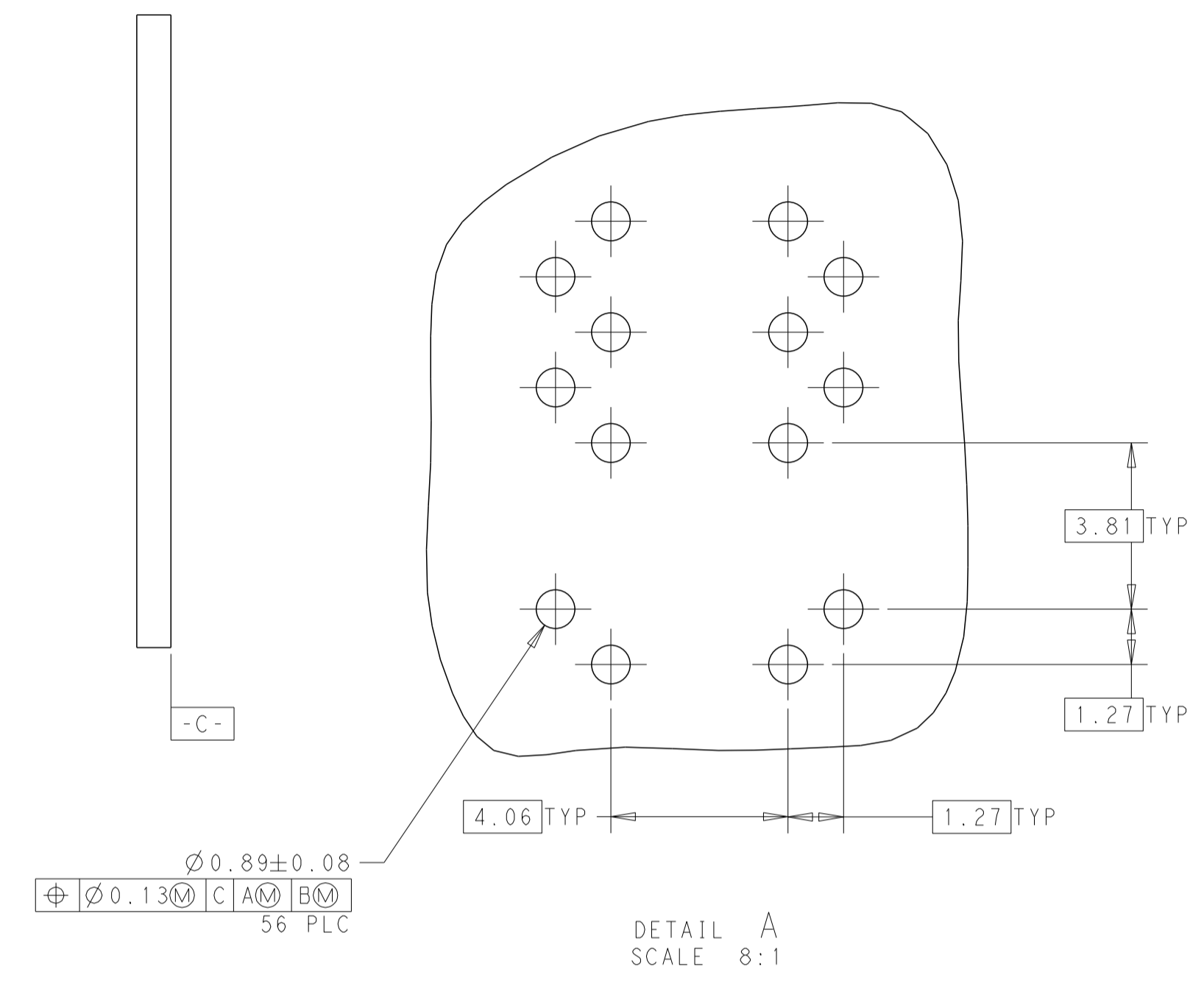
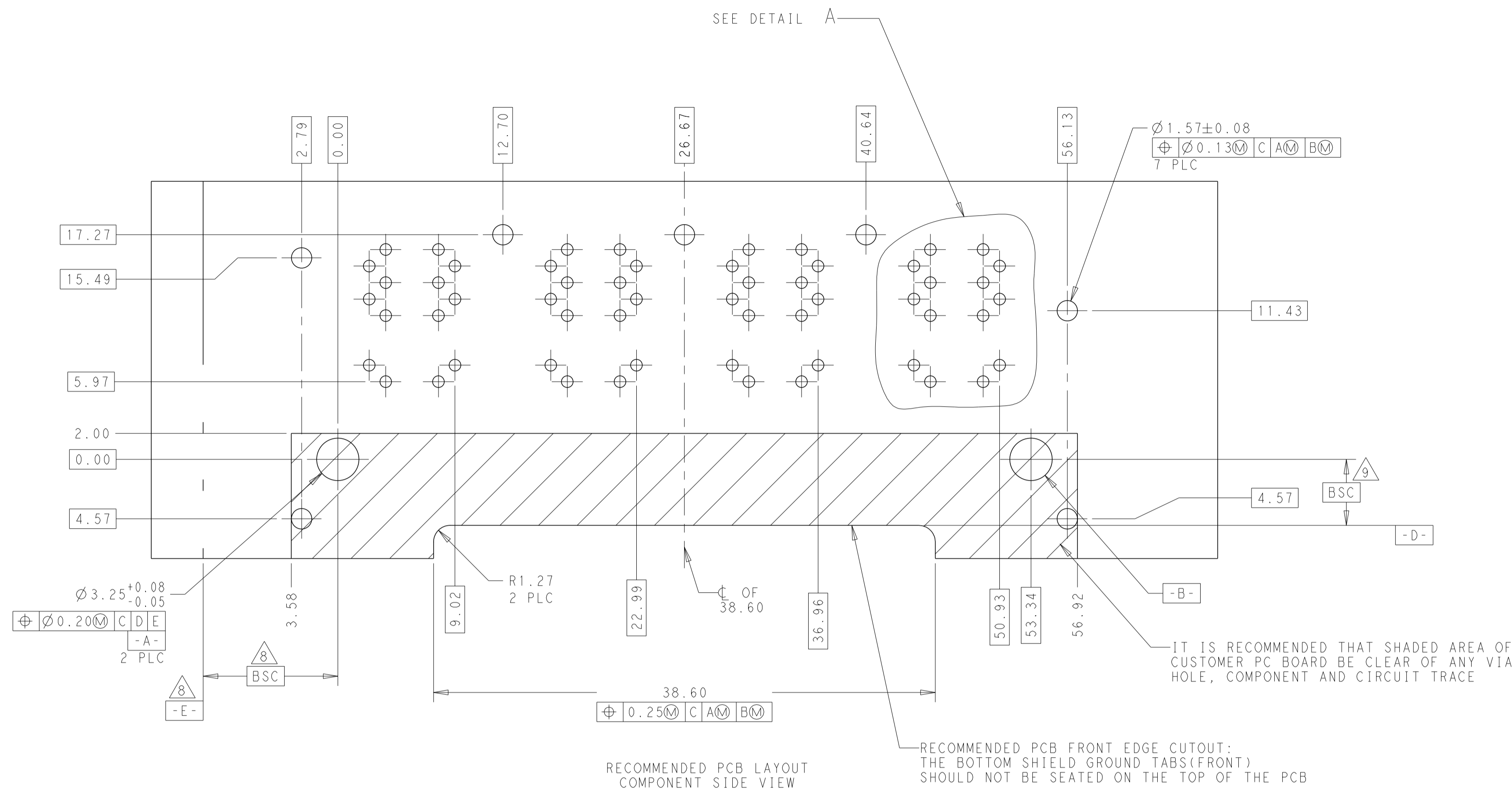
- MATERIALS:  
 PLASTIC HOUSING: BLACK, THERMOPLASTIC FLAMMABILITY RATING UL 94V-0  
 SHIELD: BRASS, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL,  
 POST DIPPED WITH 2.54um MIN SAC SOLDER ON SOLDER TAILS,  
 CONTACTS: PHOSPHOR BRONZE, 1.27um MIN OVERALL NICKEL  
 UNDERPLATE WITH SELECTED 1.27um MIN GOLD AT MATING INTERFACE  
 AND 2.54um MIN MATTE TIN ON SOLDER TAILS.  
 ALL PC BOARDS: HIGH TEMPERATURE PCB, TG>170°C
- MAGNETICS  
 APPLICATION: 10/100 BASE-T, PoE  
 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  
 POE CURRENT: 350mADC MAX  
 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. DATE CODE: YYWW "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 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.
- THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 260°C MAX, 10 SECONDS MAX.

1840945-1  
PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		DRW: JAMILSON CHEN 15MAR2010	 DONGGUAN CHINA
DIMENSIONS: mm		CHK: TONY YUAN 15MAR2010	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: KEITH ZHU 15MAR2010	
0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ±0.25 ANGLES ±°	PRODUCT SPEC: 108-104004 APPLICATION SPEC: -	MODEL NAME: MAGJACK STACK PoE	DESC: 2X1 S8V90 GIGABIT W/ LED SIZE: A1 CAGE CODE: C=1840945 DRAWING NO: 1840945 SCALE: 4:1 SHEET: 1 OF 3 REV: 9



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: JAMISON CHEN 15MAR2010 CHK: TONY YUAN 15MAR2010 APVD: KEITH ZHU 15MAR2010 MODEL NAME:	<b>trp</b> 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 ± PRODUCT SPEC APPLICATION SPEC ±	MODEL NAME: <b>MAGJACK</b> <b>STACK PoE</b>	
PRODUCT SPEC: 108-104004	APPLICATION SPEC: -	CUSTOMER DRAWING	SCALE: 4:1 SHEET: 2 OF 3 REV: 9



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWG: JAMISON CHEN 15MAR2010		<b>trp</b> CONNECTOR a bel group DONGGUAN CHINA	
DIMENSIONS: mm		CHK: TONY YUAN 15MAR2010			
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPROV: KEITH ZHU 15MAR2010		DESC: 2X1 S8V90 GIGABIT W/ LED	
0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ±0.25 ANGLES ±°		MODEL NAME: MAGJACK STACK PoE		SIZE: A1	
PRODUCT SPEC: 108-104004		APPLICATION SPEC: -		DRAWING NO: C=1840945	
CUSTOMER DRAWING		SCALE: 4:1		SHEET 3 OF 3 REV 9	