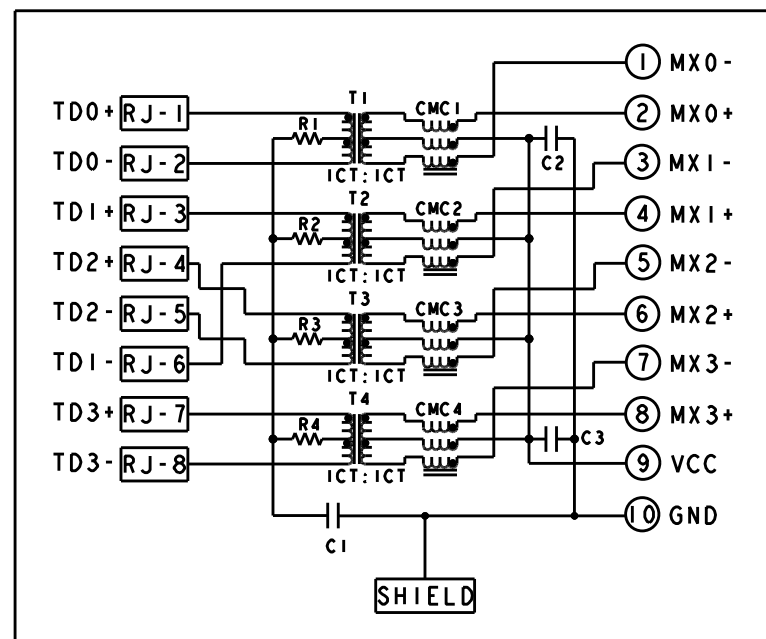


# S8G56 GIGABIT CIRCUIT

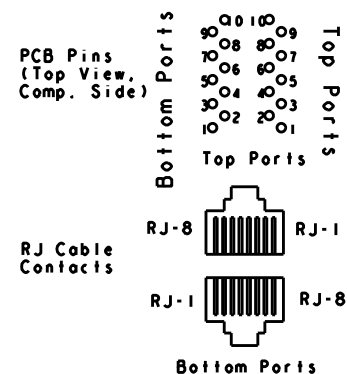
Top and Bottom Ports



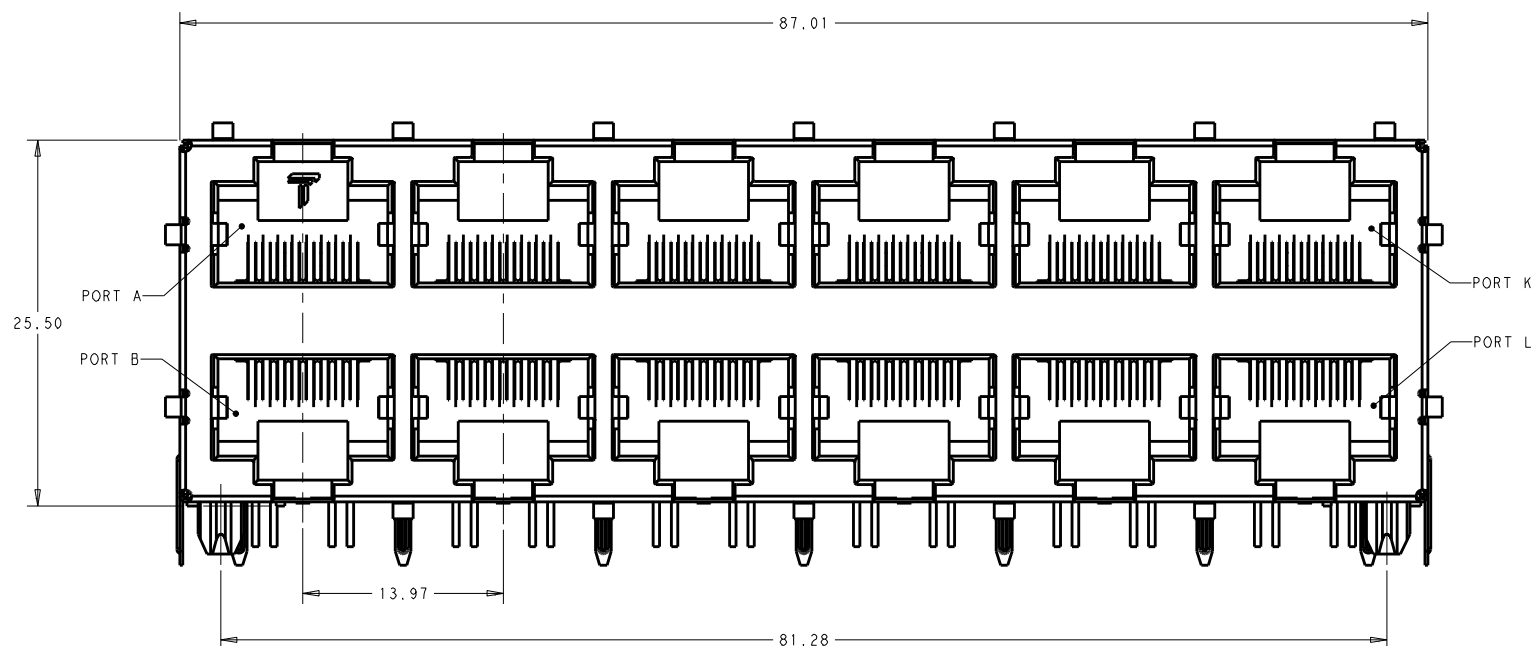
C1 = 1000pF, 2kV Capacitor  
C2 - C3 = 10nF, 50V Capacitors  
R1-R4 = 75 Ohms, 1/16 W, Resistors


## 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 SELECT 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: 10/100/1000 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: 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 "YY"  
IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK, WITH SUNDAY=1
- TRP 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.



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: TOMMY REN 11JUN2010 CHK: TONY YUAN 11JUN2010 APVD: KEITH ZHU 11JUN2010		 <b>trp</b> a bel group		DONGGUAN CHINA	
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 P.L.C ±. 2 P.L.C ±.025 3 P.L.C ±. 4 P.L.C ±. ANGLES ±.		MODEL NAME MAGJACK		DESC 2X6 S8G56 GIGABIT W/O LED	
PRODUCT SPEC 108-104004		APPLICATION SPEC -		SIZE A1		CASE CODE C=1840978	
				DRAWING NO -		RESTRICTED TO -	
CUSTOMER DRAWING				SCALE		MTC SHEET 2 OF 3 REV D	



THIS DRAWING IS A CONTROLLED DOCUMENT.		DATE 11 JUN 2010 CHK TOMMY REN 11 JUN 2010 TONY XIAN 11 JUN 2010 APVD 11 JUN 2010 REF. T4 7111		 trp CONNECTOR a bel group		DONGGUAN CHINA	
DIMENSIONS: mm 		TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 P L C ± 2 P L C ±0.25 3 P L C ± 4 P L C ± ANGLES ±		DESC 2X6 S8G56 GIGABIT W/O LED MODEL NAME		RESTRICTED TO	
PRODUCT SPEC 108-104004		APPLICATION SPEC		SIZE CAD CODE DRAWING NO A1 C=1840978		REV D	
CUSTOMER DRAWING				SCALE NTC SHEET 3 OF 3			