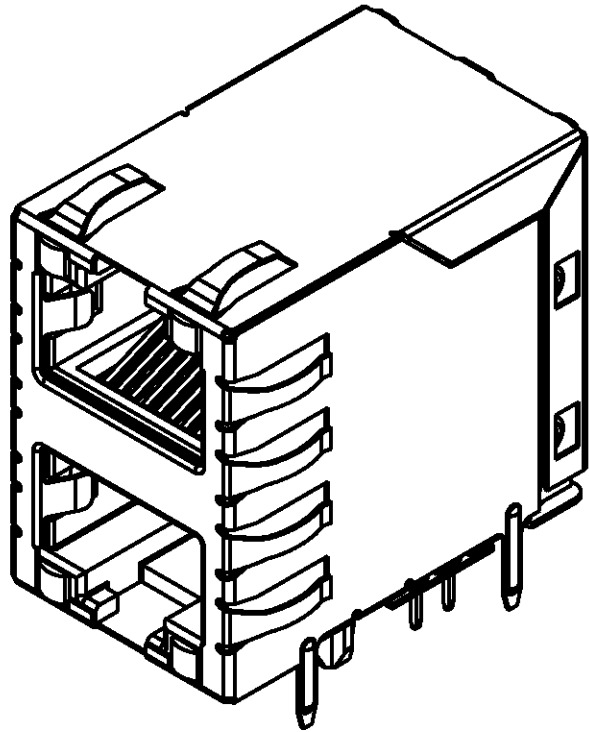
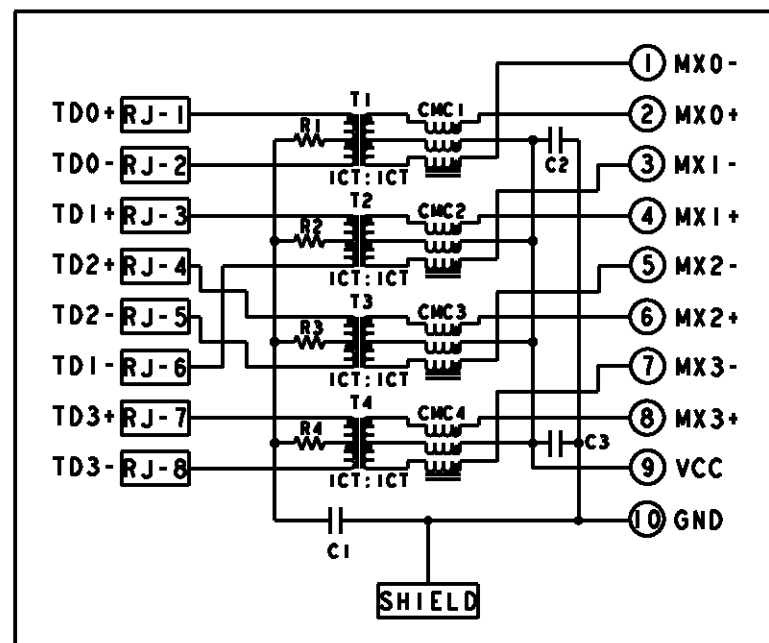




S8G56 GIGABIT CIRCUIT ⚠⚠

Top and Bottom Ports

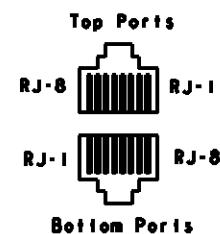
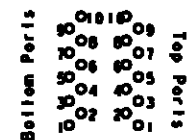


C1 = 1000pF, 2kV Capacitor
C2-C3 = 10nF, 50V Capacitors
R1-R4 = 75 Ohms, 1/16W, Resistors

Pin Designations

(Repeat for each vertical pair of ports.)

PCB Pins
(Top View,
Comp. Side)



⚠ 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
ALL PC BOARDS: HIGH TEMP 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.

⚠ TE CONNECTIVITY LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN, AGENCY APPROVAL
MARKING LOGO LOCATED IN THE APPROXIMATE AREA SHOWN. DATE CODE YY IS YEAR, WW IS
WORK WEEK, D IS DAY OF WEEK, WITH SUNDAY=1

4. THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS,
PEAK TEMPERATURE 260°C MAX, 10 SECONDS MAX.

5. 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
DOMINANT WAVELENGTH (λD): LOW WAVELENGTH GREEN (LWG) 557 nm TYP. @ IF=20mA
FORWARD VOLTAGE (VF): LOW WAVELENGTH GREEN 2.2V TYP. @ IF=20mA
DOMINANT WAVELENGTH (λD): ULTRA LOW WAVELENGTH GREEN (ULWG) 525 nm TYP @ IF=20mA
FORWARD VOLTAGE (VF): ULTRA LOW WAVELENGTH GREEN (ULWG) 2.8V TYP @ IF=20 mA
DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP. @ IF=20mA
FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. @ IF=20mA
DOMINANT WAVELENGTH (λD): ORANGE 605 nm TYP. @ IF=20mA
FORWARD VOLTAGE (VF): ORANGE 2.1V TYP. @ IF=20mA

3.04	ULWG/YEL	ULWG	ULWG	ULWG/YEL	9-1840332-7
3.04	LWG/YEL	LWG/YEL	LWG/YEL	LWG/YEL	9-1840332-4
3.04	ORANGE	GRN/ORA	ORANGE	GRN/ORA	4-1840332-4
3.04	YELLOW	GRN/ORA	YELLOW	GRN/ORA	4-1840332-3
2.29	GRN/YEL	GRN/YEL	GRN/YEL	GRN/YEL	2-1840332-4
4.06	GRN/YEL	GRN/YEL	GRN/YEL	GRN/YEL	1-1840332-4
3.04	GREEN	GRN/ORA	GREEN	GRN/ORA	1840332-9
3.04	GREEN	GRN/YEL	GREEN	GRN/YEL	1840332-8
3.04	GRN/ORA	GREEN	GRN/ORA	GREEN	1840332-6
3.04	GRN/YEL	GREEN	GRN/YEL	GREEN	1840332-5
3.04	GRN/YEL	GRN/YEL	GRN/YEL	GRN/YEL	1840332-4
3.04	GREEN	YELLOW	GREEN	YELLOW	1840332-3
3.04	YELLOW	GREEN	GREEN	YELLOW	1840332-2
3.04	GREEN	GREEN	GREEN	GREEN	1840332-1

DIM A	BOTTOM LED NO. 2 ⚠	BOTTOM LED NO. 1 ⚠	TOP LED NO. 2 ⚠	TOP LED NO. 1 ⚠	PART NUMBER
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THIS DRAWING IS A CONTROLLED DOCUMENT.		DWG TOMMY REN 04FEB2009	 TE Connectivity	
DIMENSIONS:		COR KEITH ZHU 04FEB2009		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPV KENNETH LAI 04FEB2009		
mm		PRODUCT SPEC		
	1. PLC	±0.25	PART 2X1 MAG45(TM).1GIGABIT S8056 CIRCUIT WAVE PANEL, GROUND SHIELD, W/LEDS	
	2. PLC	±0.25		
	3. PLC	±0.25		
	4. PLC	±		
ANGLES		±	SIZE CAGE CODE DRAWING NO RESTRICTED TO	
MATERIAL		APPLICATION SPEC		
FINISH		WEIGHT		
-		CUSTOMER DRAWING		
			A 00779 C-1840332	
			SCALE NTS SHEET 1 OF 3 REV F	

THIS DRAWING IS A CONTROLLED DOCUMENT.		DATE 04FEB2009 DRAWN BY TOMMY REN CHKD BY KEITH ZHU APPROVED BY KENNETH LAI	 TE Connectivity	
DIMENSIONS: mm 		TOLERANCES UNLESS OTHERWISE SPECIFIED: P L/C ±0.25 P L/C ±0.25 P L/C ±0.25 P L/C ±0.25 P L/C ANGLES ±° ±° FINISH	NAME 2X1 MAG45(TM).G16ABIT S8G56 CIRCUIT WAVE PANEL, GROUND SHIELD, W/LEDS SIZE 1 CASE CODE 00779 DRAWING NO. C-1840332 RESTRICTED TO -	
MATERIAL 		WEIGHT - CUSTOMER DRAWING	SCALE NTS	SHEET 2 OF 3 REV F

