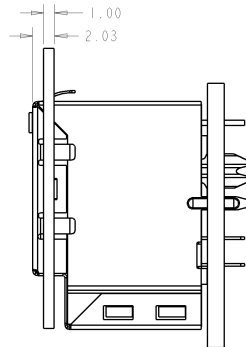
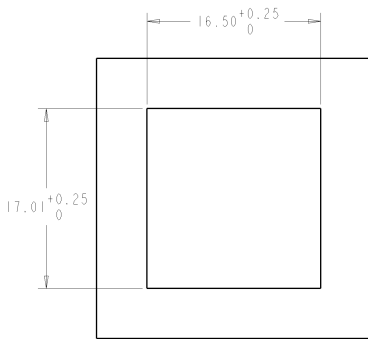
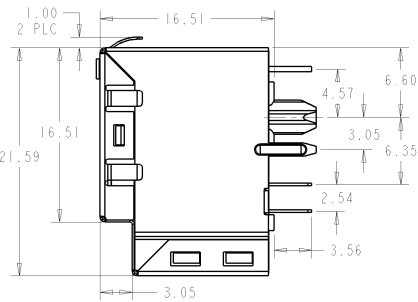
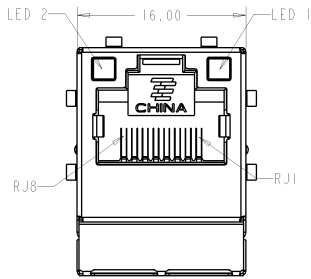
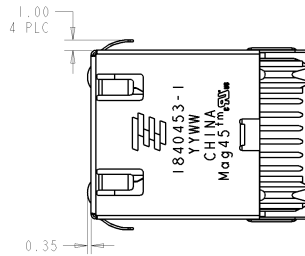
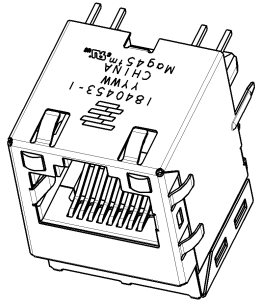


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REV. NO.		REV. DATE		REVISIONS	
NO.	DATE	BY	DESCRIPTION	DATE	APP'D.
1	19NOV2007	TR	INITIAL RELEASE		TY
2	22APR2008	TR	ECO-08-084426		TY
A	11JUN2009	TR	ECO-09-012723		KL



- MATERIALS  
 HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATED UL 94V-0  
 SHIELD: BRASS, 0.20mm THICK,  
 PREPLATED WITH MIN 0.76um SEMI-BRIGHT NICKEL  
 POST DIPPED WITH 2.54um MIN SAC SOLDER AT GROUND PINS.  
 CONTACT: PHOSPHOR BRONZE,  
 WITH 1.27um MIN OVERALL NICKEL UNDERPLATE AND  
 SELECTIVE 1.27um MIN GOLD PLATING AT MATING INTERFACE  
 SOLDER TAIL: PHOSPHOR BRONZE,  
 WITH 1.27um MIN OVERALL NICKEL UNDERPLATE AND  
 PLATED WITH 2.54um MIN TIN  
 LED: DIFFUSED EPOXY LENS, 0.50mm SQUARE CARBON STEEL WIREFRAME LEADS  
 PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL  
 OVER 1.02um MIN COPPER UNDERPLATE POST PLATED WITH 2.54um MIN TIN

- MAGNETICS  
 -APPLICATION: 10/100/1000 BASE-T  
 -IMPEDANCE: 100 OHMS  
 -TURNS RATIO (CHIP: CABLE): 1:1 ALL FOUR PAIRS  
 -OPEN CIRCUIT INDUCTANCE (OCL): 350nH 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/30)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.

- THE MAGNETIC ARE SYMMETRICAL AND SUPPORT AUTO-MDIX OPERATION.
- OPERATING TEMPERATURE: 0 ~ 70°C
- LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.  
 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
- ALL DIMENSIONS TO BE NOMINAL UNLESS OTHERWISE NOTED
- RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.

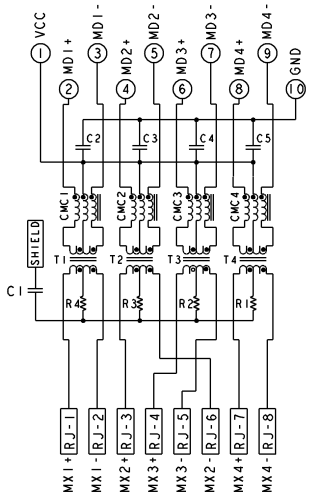
GRN/YEL	GRN/YEL	1840453-4
YELLOW	GREEN	1840453-3
GREEN	YELLOW	1840453-2
GREEN	GREEN	1840453-1
LED 1	LED 2	PART NUMBER

DIMENSIONS: mm 0 PLC 40.25 1 PLC 20.25 2 PLC 20.25 3 PLC 20.25 4 PLC # UNGLED FINISH #		DWG TYPICAL REV (3NOV2007) PLCLH ZH (3NOV2007) REV (3NOV2007) 108-2100 APPLICATION SPEC WEIGHT CUSTOMER DRAWING	Tyco Electronics Changping, China (1X) MAG45(TM) MODULAR JACK, VERTICAL TYPE, 4G46P1 CIRCUIT, WITH LED WITH GROUND TABS SIZE (CASE CODE) DRAWING NO. A2 00779 © 1840453 SCALE 3:1 SHEET 1 OF 2 REF A
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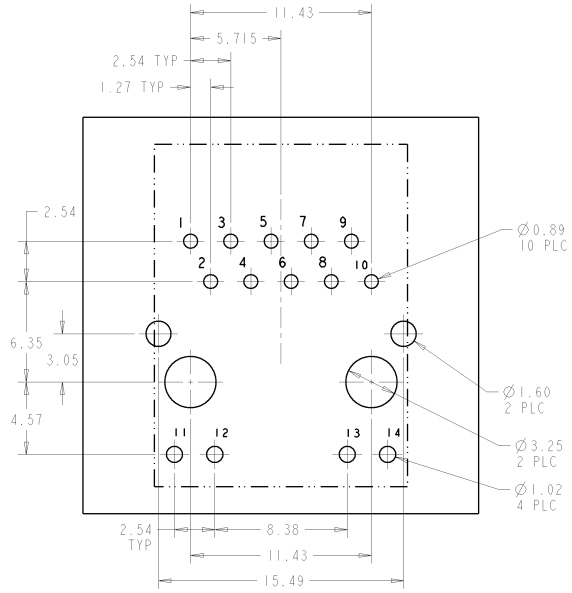
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REV	DATE	DESCRIPTION	DATE	CHK	APP
AA	00	SEE SHEET 1	-	-	-

# 4G46PI GIGABIT CIRCUIT

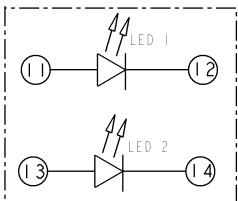


C2 - C5 = 0.1uF, 50V, CAPACITOR  
 C1 = 1000pF, 2KV, CAPACITOR  
 R1 - R4 = 75 ohms, RESISTOR

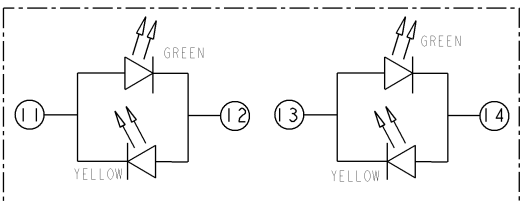


SUGGESTED PCB LAYOUT (TOL: ±0.05)  
 (COMPONENT SIDE VIEW)

SINGLE COLOR LED



BI-COLOR LED



DIMENSIONS: mm		DWG NO: TOMMY_REW (30NOV2007) DATE: 30 NOV 2007 DRAWN BY: ZHI (30NOV2007) CHECKED BY: JIANG (30NOV2007)		Tyco Electronics Changping, China	
MATERIAL: UNFINISHED		WEIGHT: -		SIZE: 1X1 MAG45 (TM) MODULAR JACK, VERTICAL TYPE, 4G46PI CIRCUIT, WITH LED WITH GROUND TABS.	
CUSTOMER DRAWING		A2 00779 ©=1840453		SCALE: 3:1 SHEET 2 OF 2 REF A	