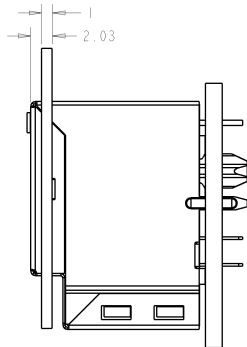
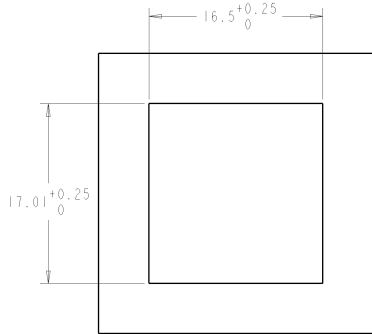
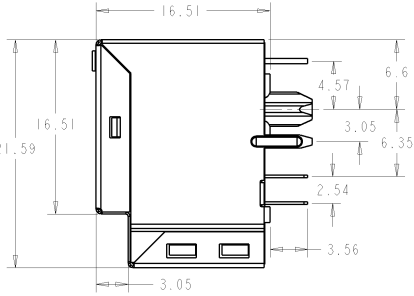
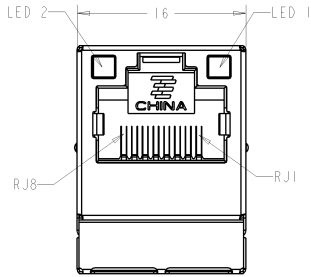
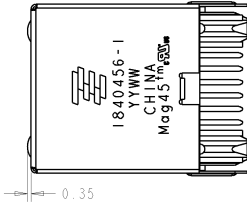
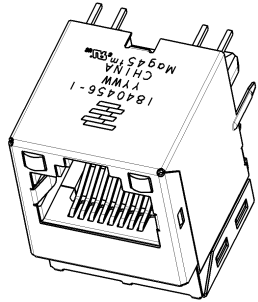


THIS DRAWING IS UNPUBLISHED.
RELEASED FOR PUBLICATION
(C) COPYRIGHT 2008 BY TYCO ELECTRONICS CORPORATION. ALL RIGHTS RESERVED.

REV	DATE	DESCRIPTION	DATE	CHK	APP
1	26FEB2008	INITIAL RELEASE	26FEB2008	TR	TY
2	10APR2008	ECO-08-008938	10APR2008	TR	TY



1. 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
-OPEN CIRCUIT INDUCTANCE (OCL): 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(X.D)
GREEN 568nm TYP. @ IF=20mA
YELLOW 588nm TYP. @ IF=20mA
FORWARD VOLTAGE(VF):
GREEN 2.2V TYP. @ IF=20mA
YELLOW 2.1V TYP. @ IF=20mA
ALL DIMENSIONS TO BE NOMINAL UNLESS OTHERWISE NOTED
RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.

DESIGN APPROVED THIS PRINT IS
PRELIMINARY
TO FIRST PIECE APPROVAL
CONTACT PRODUCT ENGINEERING
BEFORE USING THIS PRINT.

GRN/YEL	GRN/YEL	1840456-4
YELLOW	GREEN	1840456-3
GREEN	YELLOW	1840456-2
GREEN	GREEN	1840456-1

PRELIMINARY

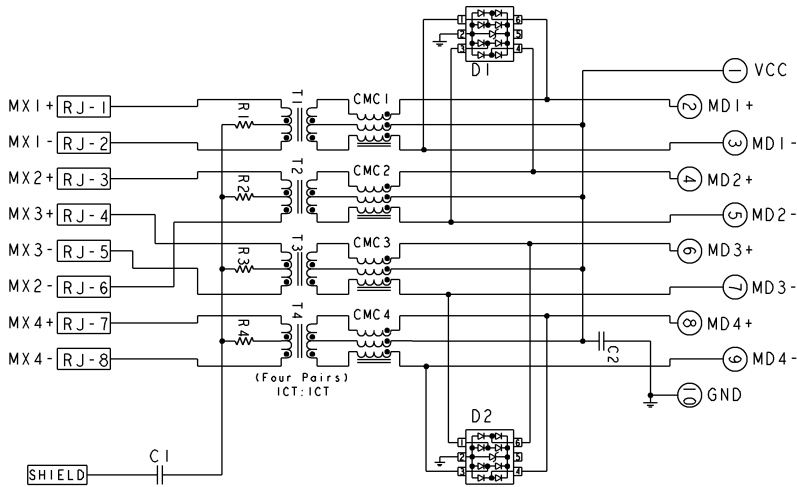
DIMENSIONS			PART NUMBER		
mm	0 PLG	40.25	FRANK LIU	26FEB2008	DATE
	1 PLG	20.25	FRANK LIU	26FEB2008	DATE
	2 PLG	20.25	FRANK LIU	26FEB2008	DATE
	3 PLG	20.25			
	4 PLG	41			
	UNPLED FINISH				

1X1 MAG45(TM) MODULAR JACK, VERTICAL TYPE, 4059 CIRCUIT, WITH LED

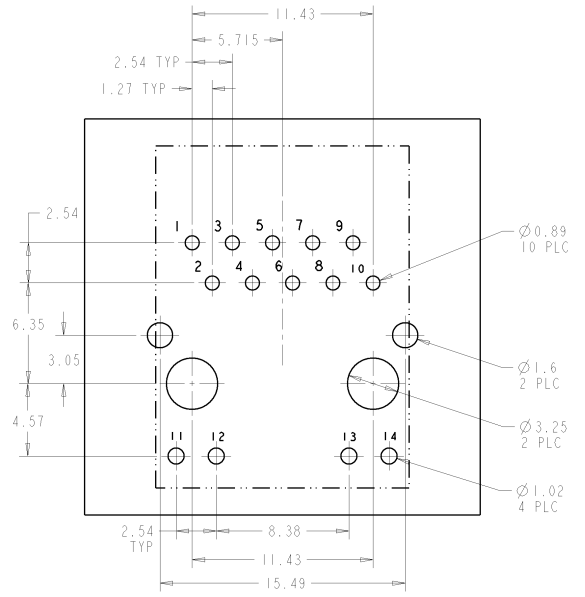
THIS DRAWING IS UNPUBLISHED.
 RELEASED FOR PUBLICATION
 (C) COPYRIGHT © 2008 BY TYCO ELECTRONICS CORPORATION. ALL RIGHTS RESERVED.

REV	DATE	DESCRIPTION	DATE	APP
AA	00	SEE SHEET 1	-	-

4G59 GIGABIT CIRCUIT

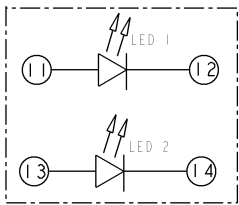


- C1 = 1000pF, 2KV, CAPACITOR
- C2 = 0.1uF, 50V, CAPACITOR
- R1 - R4 = 75 ohms, RESISTORS
- D1 - D2 = SRV05-4, TVS DIODE ARRAYS

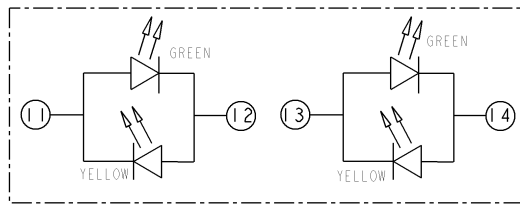


SUGGESTED PCB LAYOUT (TOL: ±0.05)
 (COMPONENT SIDE VIEW)

SINGLE COLOR LED



BI-COLOR LED



DESIGN APPROVED THIS PRINT IS
PRELIMINARY
 TO FIRST PIECE APPROVAL
 CONTACT PRODUCT ENGINEERING
 BEFORE USING THIS PRINT

DIMENSIONS: mm		DWG NO: 26FEB2008 DESIGNED BY: TOMMY REK CHECKED BY: FRANK LIU DATE: 26FEB2008		Tyco Electronics Tyco Electronics Changping, China	
MATERIAL: FINISH:		APPLICATION SPEC: WEIGHT:		NAME: 1X1 MAG45(TM) MODULAR JACK, VERTICAL TYPE, 4G59 CIRCUIT, WITH LED SIZE: A2 CASE CODE: 00779 DRAWING NO: 1840456	
CUSTOMER DRAWING		SCALE: 1:1		SHEET 2 OF 2 REV 2	