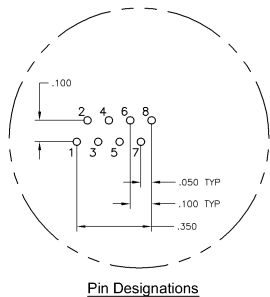
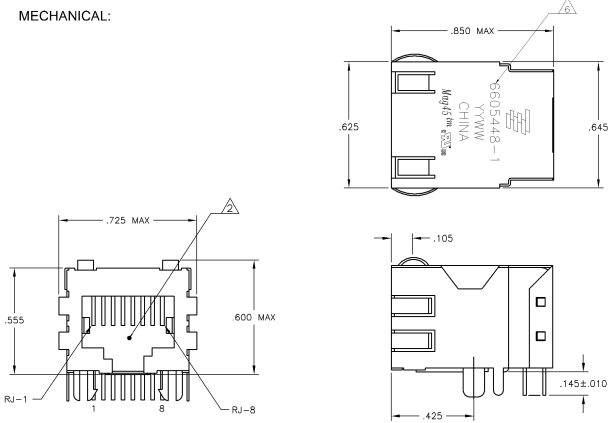
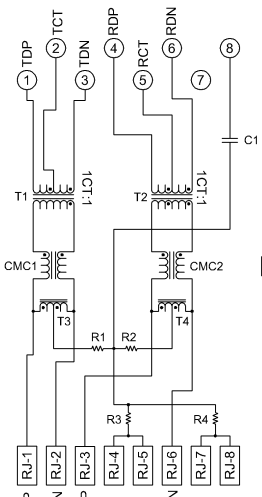


**MECHANICAL:**

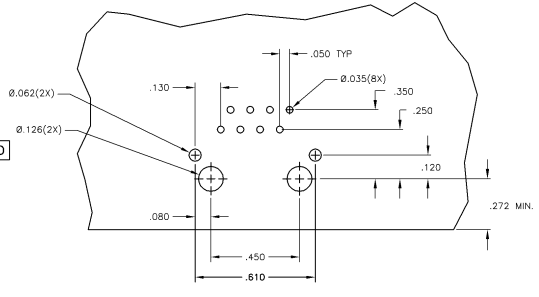
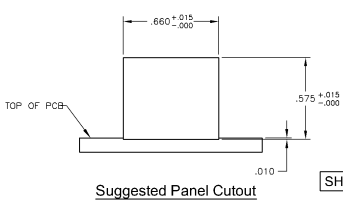


- MATERIALS:**  
 HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0  
 SHIELD - .010" THICK, C26800 BRASS PREPLATED WITH .30µINCH MIN SEMI-BRIGHT NICKEL  
 SOLDER TABS POST DIPPED WITH 100µINCH MIN SAC SOLDER  
 MOD JACK CONTACTS - 0.0157 X 0.018" PHOSPHOR BRONZE, 50µINCH MIN OVERALL NICKEL UNDERPLATE WITH SELECT 50µINCH MIN HARD GOLD FINISH PLATE. SOLDER TAILS WITH 100µINCH MIN MATTE TIN AND/OR SAC SOLDER DIP.
- RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB PART F.**
- MAGNETICS**  
 -IMPEDANCE: 100 OHMS  
 -TURNS RATIO (CHIP CABLE): TX = 11, RX = 11  
 -OPEN CIRCUIT INDUCTANCE (OCL): 350nH MIN @100MHz, 0.1VRMS.  
 -BIAS BIAS FROM -40°C TO +85°C, TX AND RX  
 -PERFORMANCE @ 25°C  
 INSERTION LOSS (IL): 1.6dB MAX FROM 0.5MHz TO 100MHz  
 RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 30MHz  
 18-20dBi/30dB MIN FROM 30 MHz TO 60MHz  
 12dB MIN FROM 60 MHz TO 80MHz  
 CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 100MHz  
 33-20+/-0dB/50dB MIN FROM 40 MHz TO 100MHz  
 COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz  
 -ISOLATION VOLTAGE: COMPLIES WITH IEEE802.3 2002, PARA 23.1.1, ITEM b.
4. OPERATING TEMPERATURE: FROM -40°C TO +85°C.
- INDICATED CONNECTIONS ARE FOR BIC CONFIGURATION. THE MAGNETICS ARE SYMMETRIC, AND SUPPORT AUTO-MDIX.
- TYCO ELECTRONICS LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.
7. THE PART IS RECOMMENDED FOR WAVE SOLDERING PROCESS.  
 PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 80 SECONDS.  
 PEAK SOLDERING TEMPERATURE IS 240 °C MAX, 10 SECONDS MAX.

**415ETP1 SERIES MAGNETIC CIRCUIT**



C1=1000pF,2kV CAPACITOR  
 R1-R4 = 75 OHMS, 1/16 W RESISTORS



**Suggested PCB Layout**  
 (Component Side)

THIS DRAWING IS A CONTROLLED DOCUMENT		REV	DATE	DESCRIPTION	BY	CHK
DESIGNED	REVISED	1				
DRAWN	ISSUED	2				
CHECKED	APPROVED	3				
DATE	BY	DATE	BY	DATE	BY	DATE
CUSTOMER DRAWING		6605448-1 PART NUMBER				