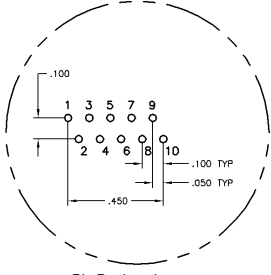
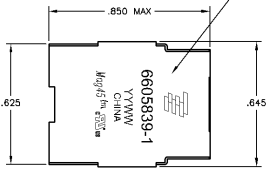
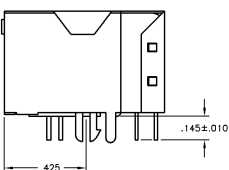
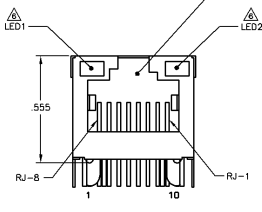


MECHANICAL:

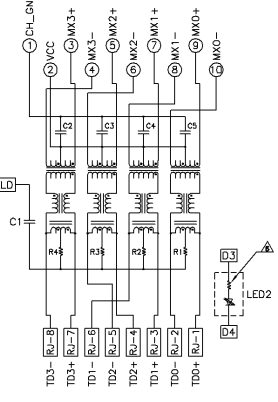


Pin Designations

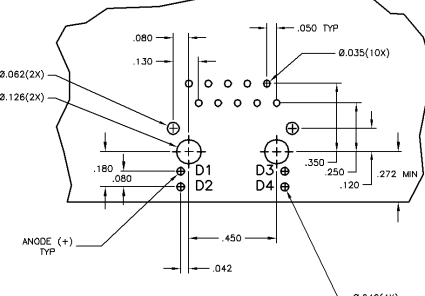


ELECTRICAL:

7G05 GIGABIT MAGNETIC CIRCUIT

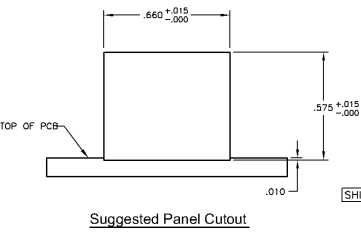


C1=1000 pF, 2kV DECOUPLING CAPACITOR
 R1-R4 = 75 OHMS, 1/16 W RESISTORS
 C2-C5 = 0.1uF, 10%, 50V CAPACITORS



Suggested PCB Layout (Component Side)

- 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 TABS WITH 100μINCH MIN MATE TIN AND/OR SAC SOLDER DIP.
 - LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, .028" x .028" CARBON STEEL WIREFRAME LEADS PRE-PLATED WITH 80μINCH SILVER OVER 40μINCH NICKEL UNDERPLATE OVER 40μINCH COPPER UNDERPLATE, POST-PLATED WITH 100μINCH MIN MATE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP.
- RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB PART F.**
- MAGNETICS**
- IMPEDANCE: 100 OHMS
 - TURNS RATIO (CHP-CABLE): 1:1 ALL FOUR PAIRS
 - OPEN CIRCUIT INDUCTANCE (OCL): 350nH MIN @100MHz, 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): 16dB MIN FROM 0.5MHz TO 40MHz
 - 12-20LOG(f/80dB) MIN FROM 4.0MHz TO 100MHz
 - CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz
 - 33-20*LOG(f/50dB) MIN FROM 4.0MHz TO 100MHz
 - COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz
 - ISOLATION VOLTAGE: COMPLIES WITH IEEE802.3 2002, PARA 4.8.1.1, ITEM 15.
4. OPERATING TEMPERATURE: FROM 0°C TO -70°C.
- THE MAGNETICS ARE SYMMETRICAL, AND THEREFORE ARE AUTO-MDI/MOIX CAPABLE.**
- LEDS WITH BUILT-IN RESISTOR**
- LEDS ARE DRIVEN WITH 5V VOLTAGE AND THE MAX OPERATING CURRENT IS 20mA.
- LED COLOR: DOMINANT WAVELENGTH (AD): GREEN 568 nm TYP @ VF=5V
 FORWARD CURRENT (IF): GREEN 12mA TYP @ VF=5V
 DOMINANT WAVELENGTH (AD): YELLOW 588 nm TYP @ VF=5V
 FORWARD CURRENT (IF): YELLOW 15mA TYP @ VF=5V
- TYCO ELECTRONICS LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.**
8. THE PART IS RECOMMENDED FOR WAVE SOLDERING PROCESS. PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK WAVE SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX.



Suggested Panel Cutout

GREEN		YELLOW		6605839-1	
LED1		LED2		PART NUMBER	
TYCO ELECTRONICS		TYCO ELECTRONICS		TYCO ELECTRONICS	
CHINA		CHINA		CHINA	
108-2100		108-2100		108-2100	
A100779		A100779		A100779	
CUSTOMER DRAWING		CUSTOMER DRAWING		CUSTOMER DRAWING	