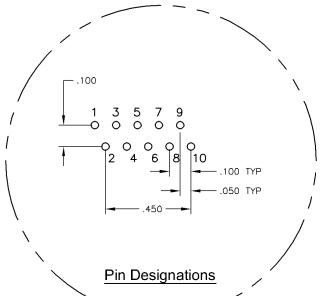
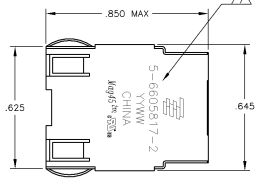
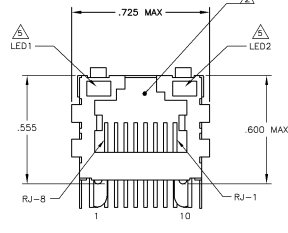
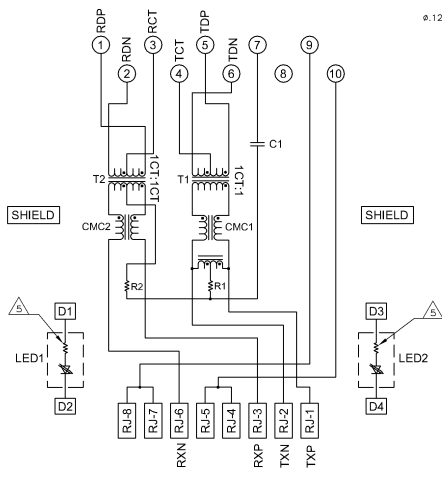


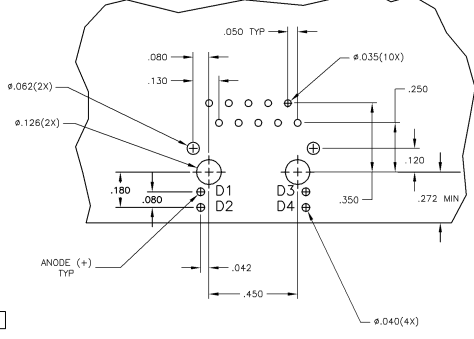
**MECHANICAL:**



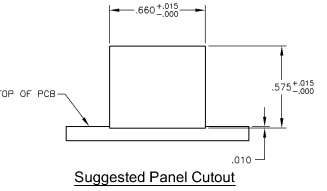
**7U14C SERIES MAGNETIC CIRCUIT**



C1=1000PF, 2KV DECOUPLING CAPACITOR  
R1-R4 = 75 OHMS, 1/16 W RESISTORS



**Suggested PCB Layout (Component Side)**



**Suggested Panel Cutout**

- △ **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 EPDXY LENS, .020" x .020" 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 (CHIP-CABLE): TX = 1:1, RX = 1:1
  - OPEN CIRCUIT INDUCTANCE (OCL): 350μH MIN @100MHz, 0.1VRMS, BRN-AC BIAS FROM 0°C TO 70°C, TX AND RX
  - PDE CURRENT: 350mA DDC MAX
  - PERFORMANCE @ 25°C:
    - INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
    - RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 30MHz
    - 18-20LOG(I)/30dB MIN FROM 30MHz TO 60MHz
    - 12dB MIN FROM 60.1MHz TO 80MHz
    - CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz
    - 33-20LOG(I)/50dB MIN FROM 40.1MHz TO 100MHz
    - COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz
    - ISOLATION VOLTAGE: COMPLIES WITH IEEE802.3af 2003, PARA 33.1.1, ITEM a.
- 4. OPERATING TEMPERATURE: FROM 0°C TO -70°C.
- △ LED WITH 250 OHM RESISTORS, LED IS DRIVEN WITH 5V VOLTAGE AND THE MAX OPERATING CURRENT IS 20mA.
- LED COLOR: DOMINANT WAVELENGTH (ND): GREEN 568 nm TYP. @ VF=5V  
FORWARD CURRENT (IF): GREEN 12 mA TYP. @ VF=5V  
DOMINANT WAVELENGTH (ND): YELLOW 588 nm TYP. @ VF=5V  
FORWARD CURRENT (IF): YELLOW 13 mA TYP. @ VF=5V
- △ INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE ASYMMETRIC, AND DO NOT SUPPORT AUTO-IND/MODX.
- △ TYCO ELECTRONICS LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.
- 8. THESE PARTS ARE 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.

REVISIONS	DATE	BY	CHKD	APPD
22				

DESCRIPTION	DATE	BY	CHKD	APPD
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DATE	DESCRIPTION	BY	CHKD	APPD
10/05/2008	REV PER ECO-08-021532			

THIS DRAWING IS A CONTROLLED DOCUMENT	REV	DATE	DESCRIPTION	BY	CHKD	APPD
1	1	10/05/2008	REV PER ECO-08-021532			

UNITS	SCALE	DATE	BY	CHKD	APPD
MM	1:1				