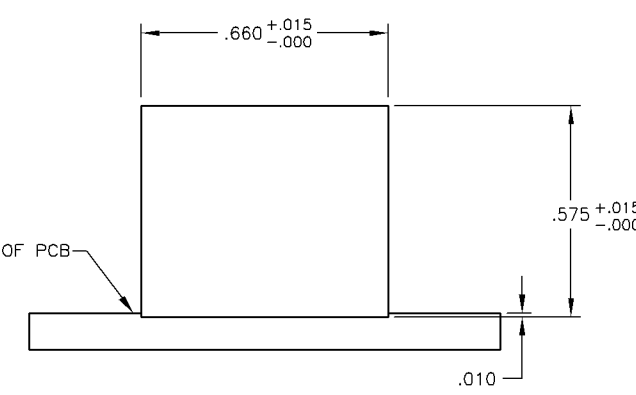
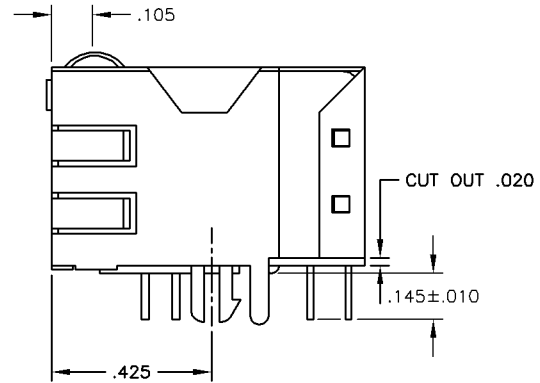
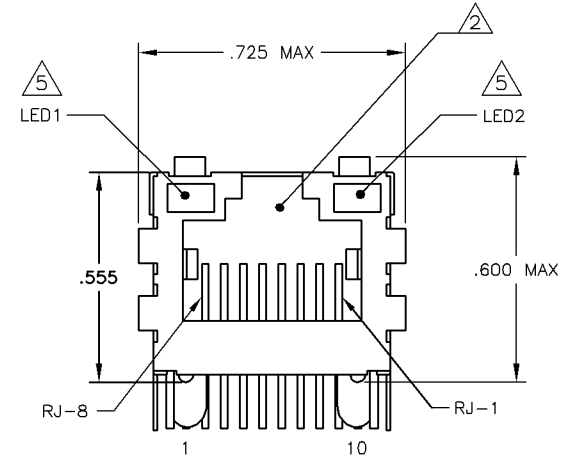
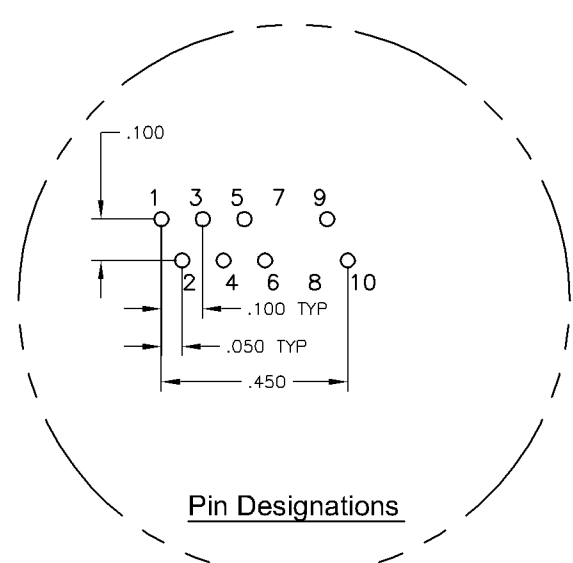
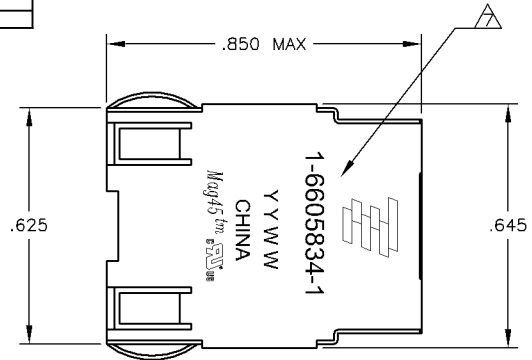


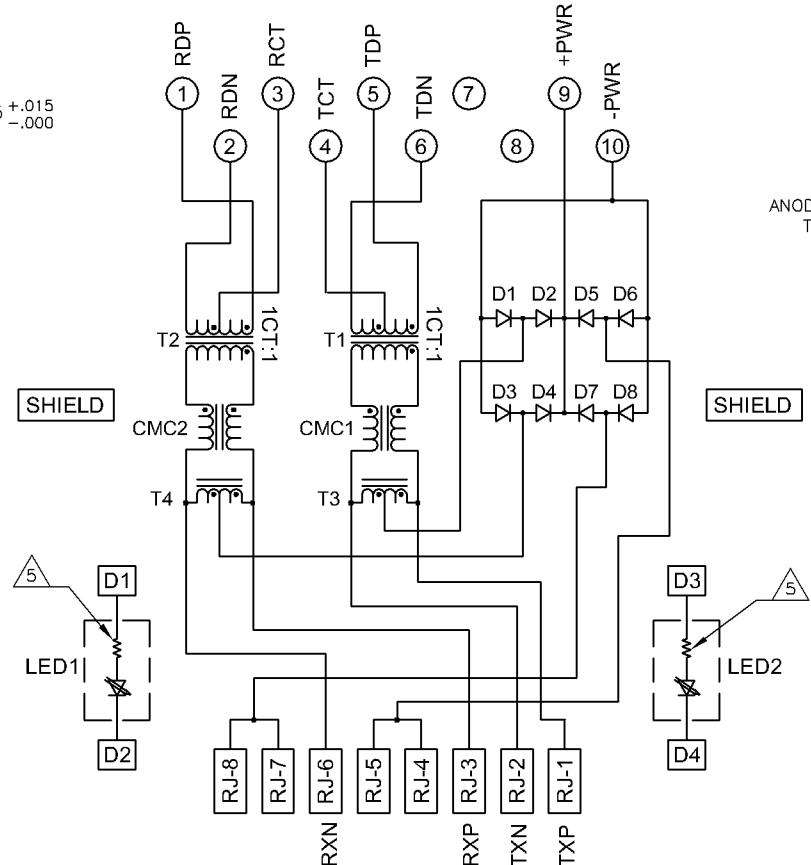
LOC	DIST	REVISIONS			
AA	22	REV	PER	DATE	BY
		D	REV PER ECD-09-009947	17APR2009	VL LR

**MECHANICAL:**

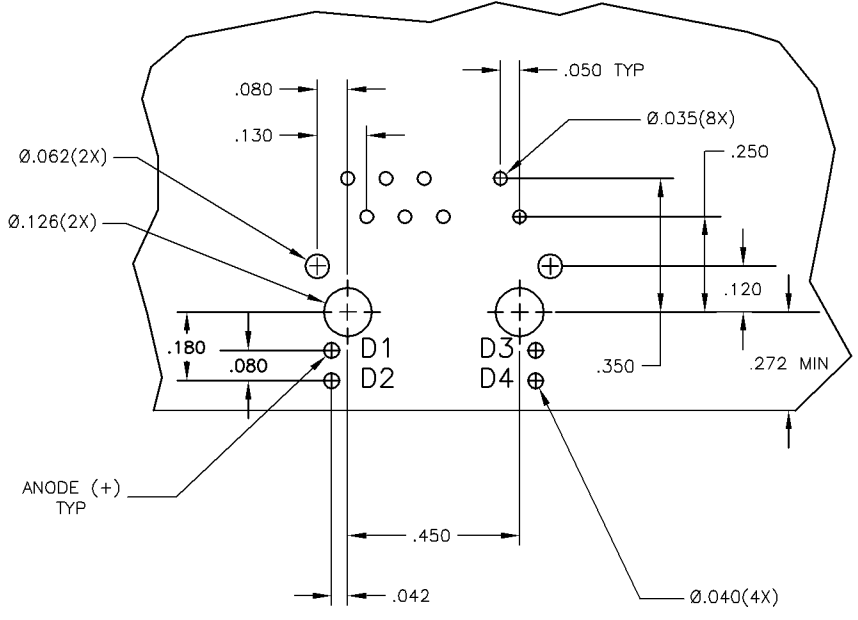


**Suggested Panel Cutout**

**ELECTRICAL:**  
7D15 PoE MAGNETIC CIRCUIT



D1-D8 = RECTIFIER DIODE  
 -FORWARD VOLTAGE, Vf = 1.2V MAX @ If = 0.5A  
 -FORWARD CURRENT, If = 0.5A MAX  
 -REVERSE VOLTAGE, Vr = 80V MAX



**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 TAILS WITH 100μINCH MIN MATTE TIN AND/OR SAC SOLDER DIP.  
 -LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY 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 MATTE 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 @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, TX AND RX  
 -POE CURRENT: 350mADC 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(f/30)dB MIN FROM 30.1MHz TO 60MHz  
 12dB MIN FROM 60.1MHz TO 80MHz  
 CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 4.0MHz  
 33-20\*LOG(f/50)dB MIN FROM 4.01MHz TO 100MHz  
 COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz  
 -ISOLATION VOLTAGE: COMPLIES WITH IEEE802.3af 2003, PARA 33.4.1, ITEM a.
- 4. OPERATING TEMPERATURE: FROM 0°C TO +70°C.
- △ IF THE LED WITH 250 OHM RESISTORS, LED IS DRIVEN WITH 5V VOLTAGE AND THE MAX OPERATING CURRENT IS 20mA.  
 LED COLOR : DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP. @ VF=5V  
 FORWARD CURRENT (IF): GREEN 12 mA TYP. @ VF=5V  
 DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP. @ VF=5V  
 FORWARD CURRENT (IF): YELLOW 13 mA TYP. @ VF=5V
- △ INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE SYMMETRICAL, AND ARE AUTO-MDI/MDIX CAPABLE.
- △ TYCO ELECTRONICS LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.
- B. 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.

GREEN	GREEN	1-6605834-1
GREEN	YELLOW	6605834-1
LED1	LED2	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		DRN L. VARELA - DOCK5 04MAR2009	Tyco Electronics Corporation ChangPing, China	
DIMENSIONS: INCHES		APD D. FAROLE 04MAR2009	NAME	
0 PLC ± -	TO DIMENSIONS UNLESS OTHERWISE SPECIFIED:	108-2100		
1 PLC ± -		APPLICATION SPEC		
2 PLC ± .010		SIZE	DATE CODE	DRAWING NO
3 PLC ± .005		A1	00779	C=6605834
4 PLC ± -		CUSTOMER DRAWING		RESTRICTED TO
ANGLES ± -		SCALE	NTS	SHEET 1 of 1
MATERIAL	FINISH	REV D		