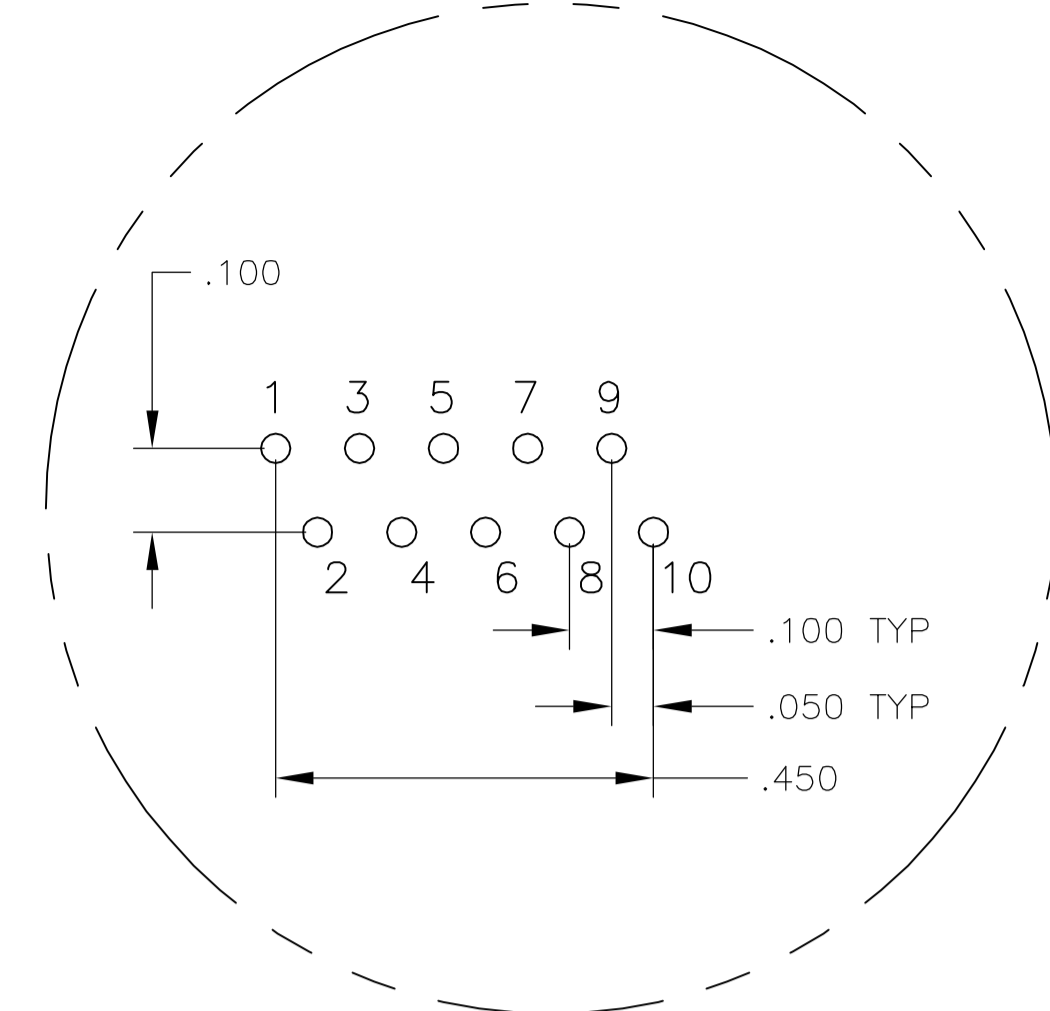
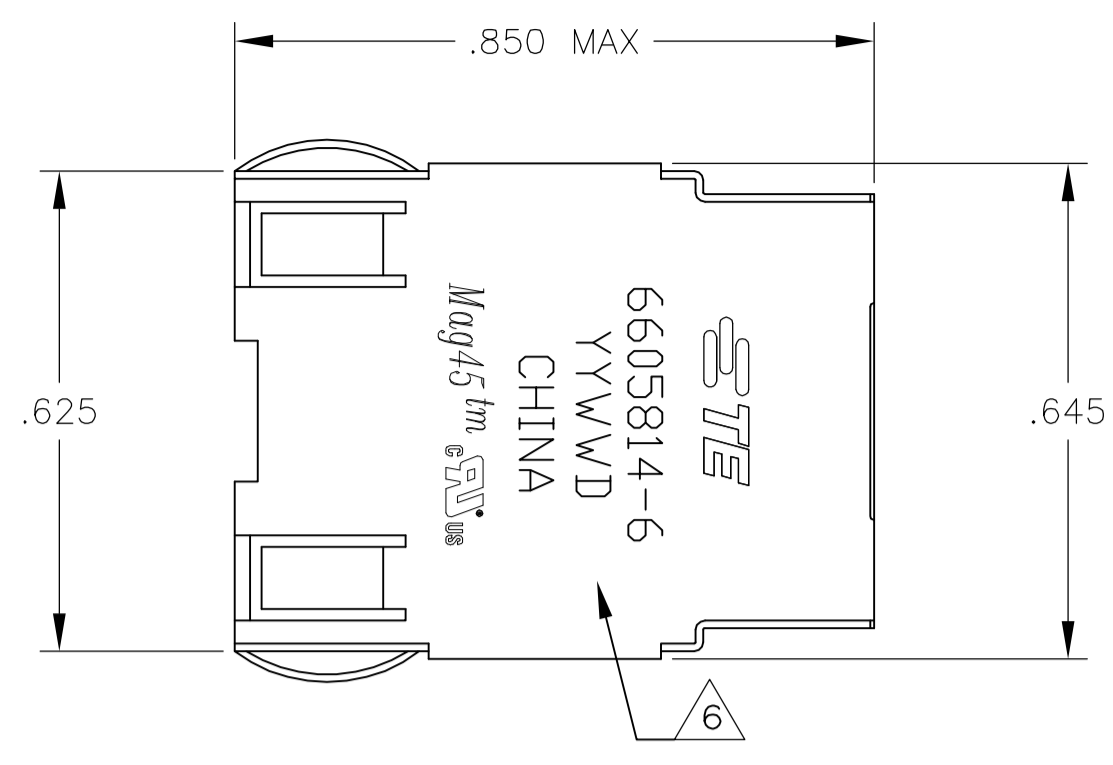
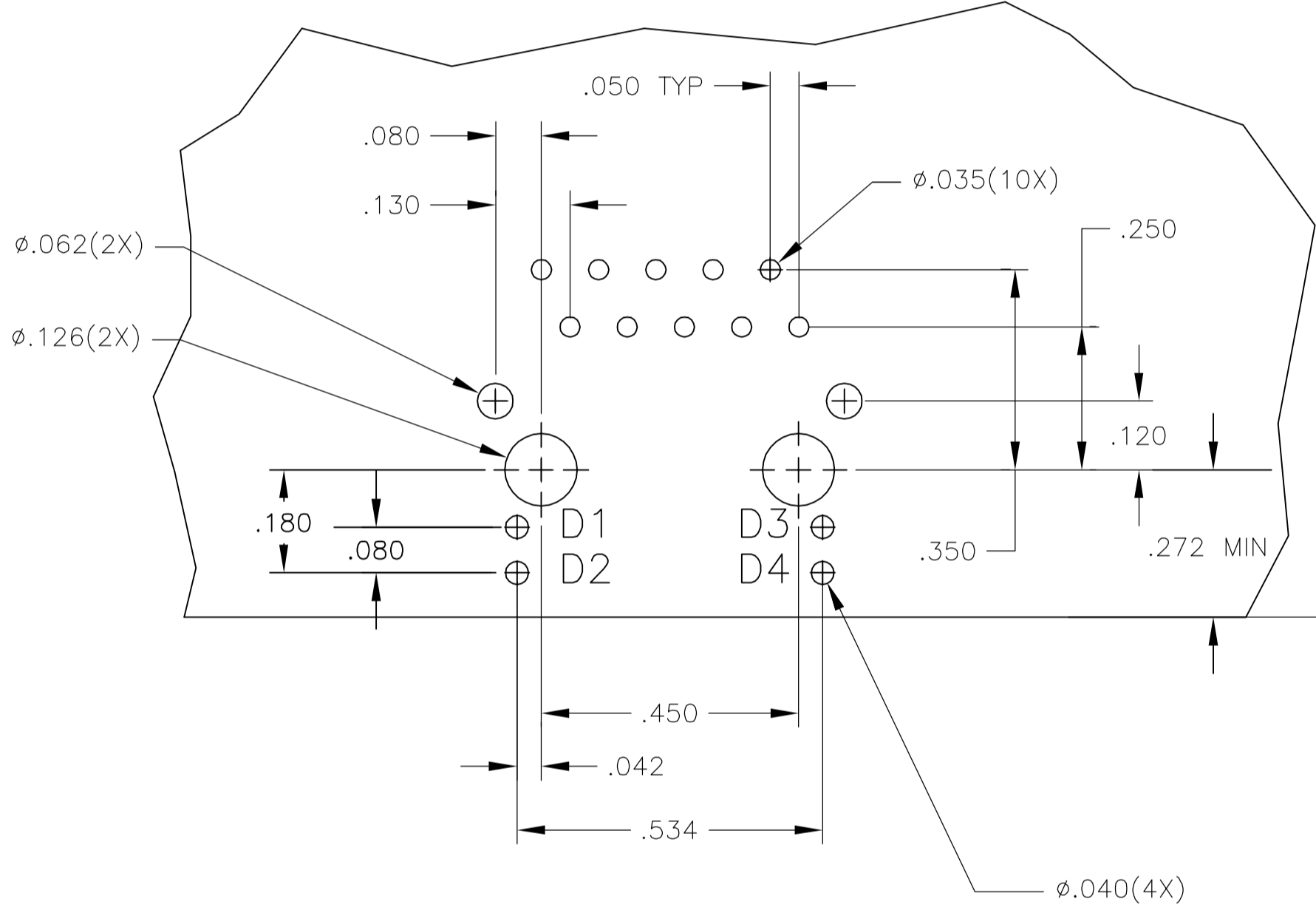
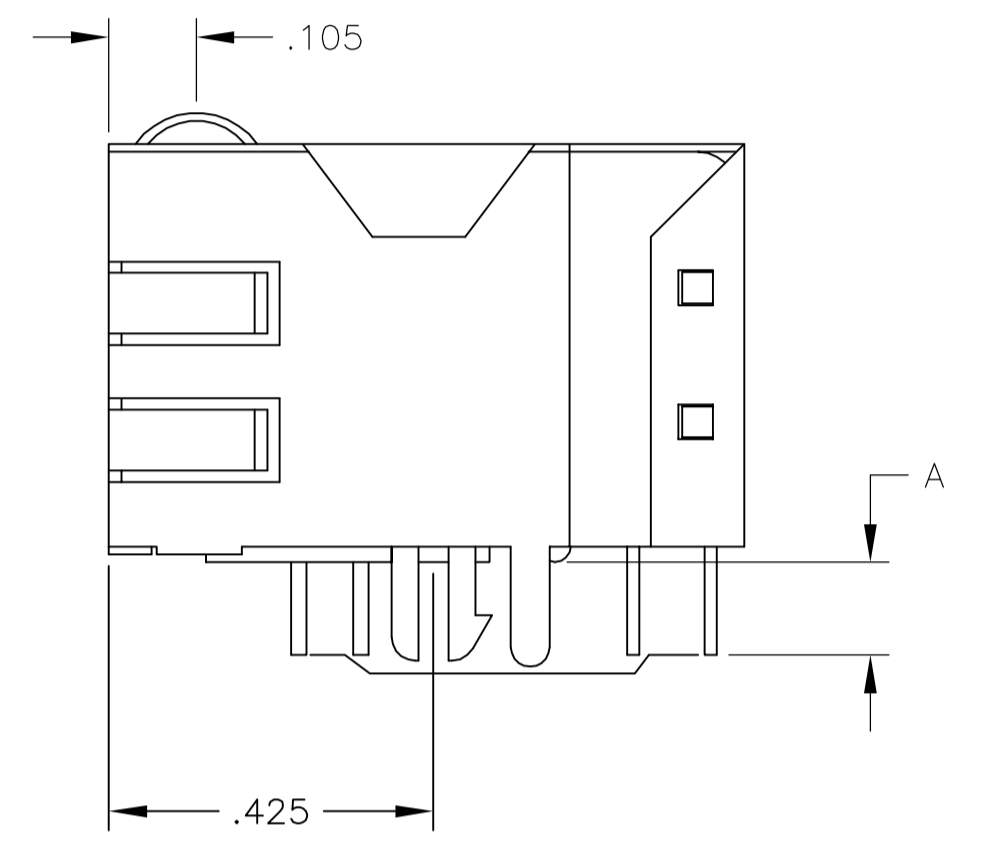
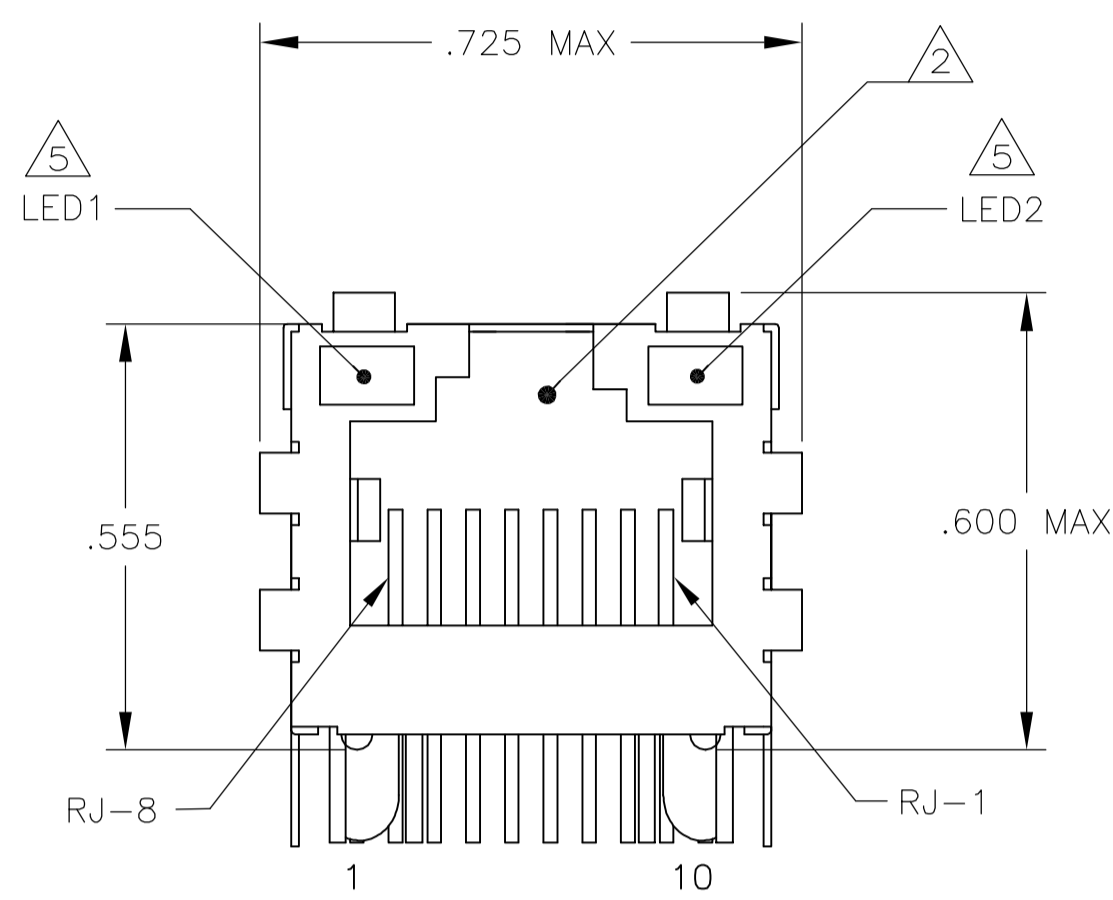


LOC		DIST		REVISIONS			
P	LR	DESCRIPTION	DATE	OWN	APP'D		
F1		REVISED PER ECO-11-005150	21MAR11	RK	HMR		
G		ECO-11-013898	30MAY2011	EL	LR		
H		ECO-11-024595	06DEC2011	PP	KZ		

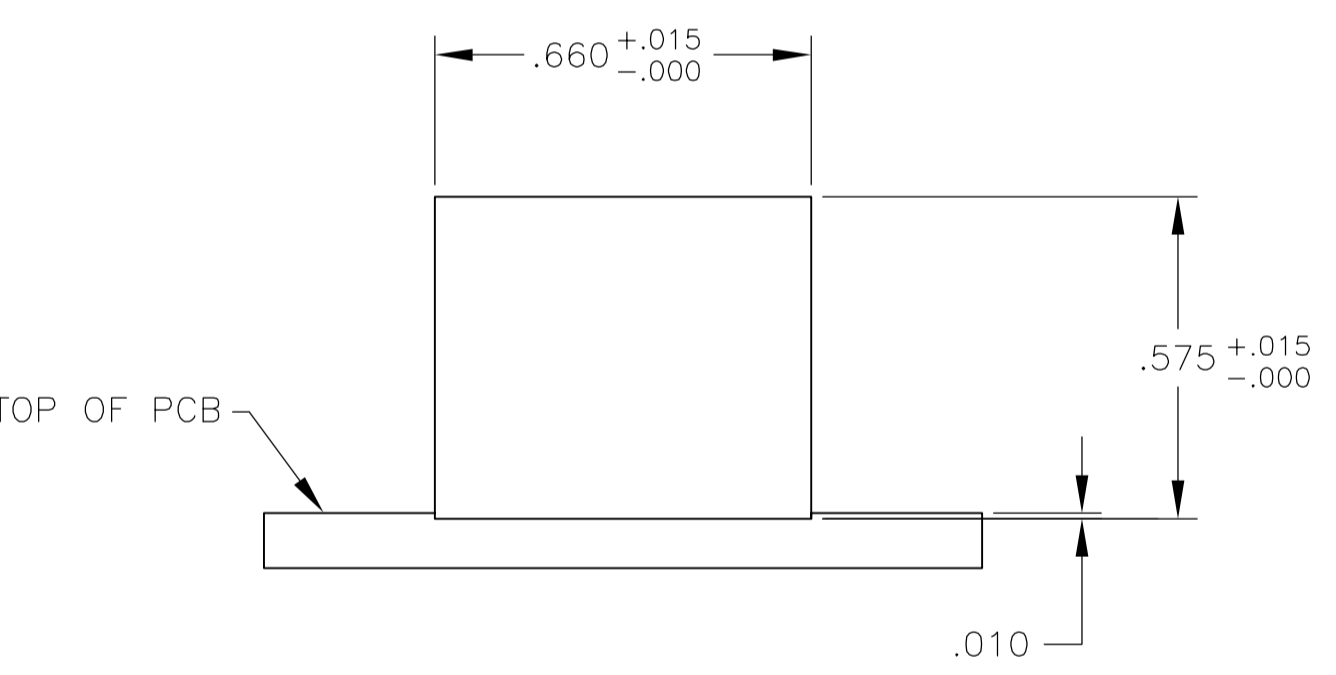
**MECHANICAL:**



**Pin Designations**

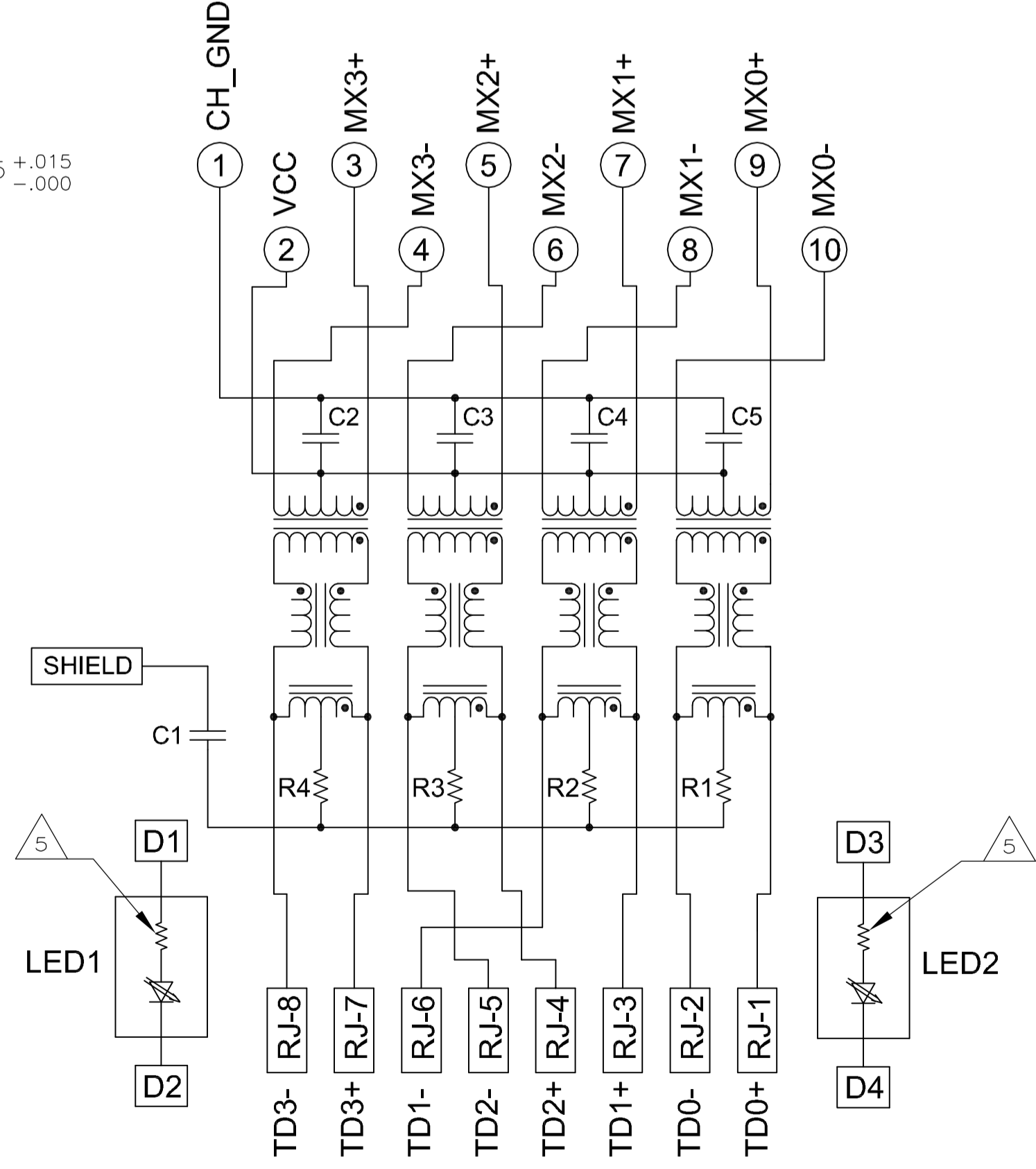


**Suggested PCB Layout (Component Side)**

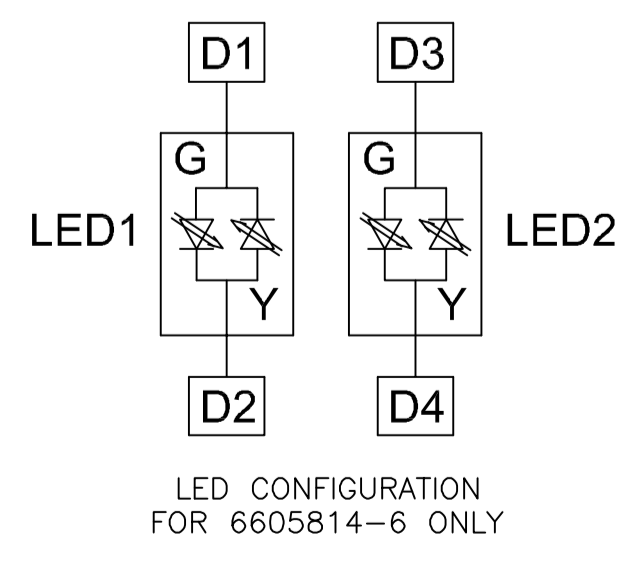


**Suggested Panel Cutout**

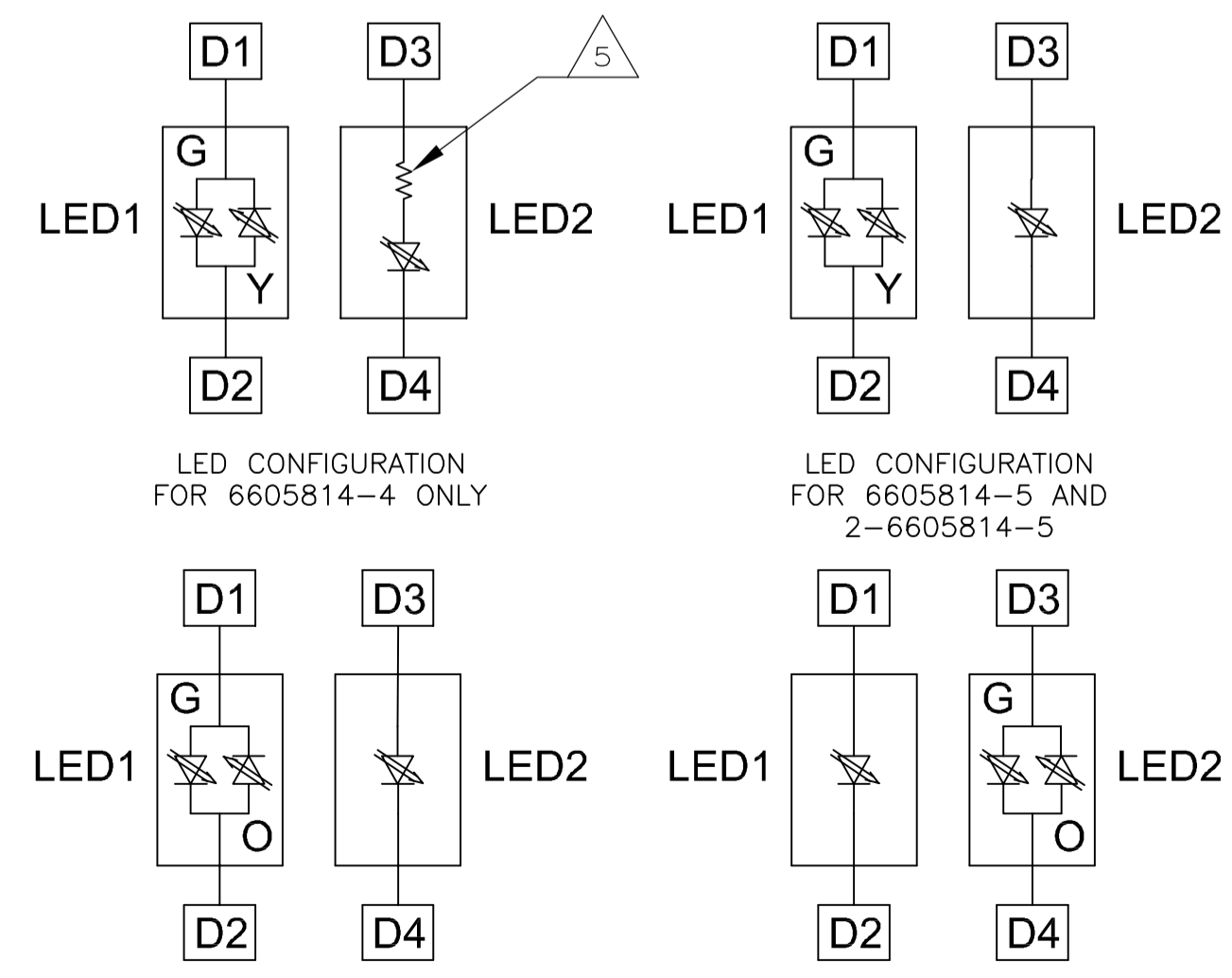
**7G05 SERIES GIGABIT CIRCUIT**



**C1=1000 pF, 2kV CAPACITOR**  
**R1-R4 = 75 OHMS, 1/16 W RESISTORS**  
**C2-C5 = 0.1 uF, 50V, X7R CAPACITORS**



LED CONFIGURATION FOR 6605814-6 ONLY



LED CONFIGURATION FOR 6605814-4 ONLY

LED CONFIGURATION FOR 6605814-5 AND 2-6605814-5

LED CONFIGURATION FOR 1-6605814-3 ONLY

LED CONFIGURATION FOR 1-6605814-5 AND 1-6605814-8

- ⚠️ **MATERIALS:**  
 HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0.  
 SHIELD - .010" THICK, C26800 BRASS PREPLATED WITH 30u inch MIN SEMI-BRIGHT NICKEL;  
 SOLDER TABS POST-DIPPED WITH 100u inch MIN SAC SOLDER.  
 MOD JACK CONTACTS - .0157" x .018" THICK, PHOSPHOR BRONZE, 50u inch MIN OVERALL NICKEL UNDERPLATE, WITH SELECT 50u inch MIN HARD GOLD FINISH PLATE.  
 SOLDER TAILS WITH 100u inch MIN MATTE TIN AND/OR SAC SOLDER DIP.  
 LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, .020" x .020" CARBON STEEL WIREFRAME LEADS PREPLATED WITH 80u inch SILVER OVER 40u inch NICKEL UNDERPLATE OVER 40u inch COPPER UNDERPLATE; POST-PLATED WITH 100u inch 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**  
 -APPLICATION: 10/100/1000 BASE-T  
 -IMPEDANCE: 100 OHMS  
 -TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS  
 -OPEN CIRCUIT INDUCTANCE (OCL): 350uH 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  
 12-20LOG(f/80)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: 2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC.
- ⚠️ THE MAGNETICS ARE SYMMETRICAL, AND SUPPORTS AUTO-MDI/MDIX.
- ⚠️ THE 250 OHM LED RESISTORS ARE OPTIONAL, PLEASE SEE CHART FOR PRESENCE OR ABSENCE OF LED RESISTORS. IF THE LED WITHOUT 250 OHM RESISTORS, LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.  
 LED COLOR: DOMINANT WAVELENGTH (λ D): GREEN 568 nm TYP. at IF=20mA  
 FORWARD VOLTAGE (VF): GREEN 2.2V TYP. at IF=20mA  
 DOMINANT WAVELENGTH (λ D): YELLOW 588 nm TYP. at IF=20mA  
 FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. at IF=20mA  
 DOMINANT WAVELENGTH (λ D): ORANGE 605 nm TYP. at IF=20mA  
 FORWARD VOLTAGE (VF): ORANGE 2.1V TYP. at IF=20mA
- IF THE LED WITH 250 OHM RESISTORS, LED IS DRIVEN WITH 5V VOLTAGE AND THE MAX OPERATING CURRENT IS 20mA.  
 LED COLOR: DOMINANT WAVELENGTH (λ D): GREEN 568 nm TYP. At VF=5V  
 FORWARD CURRENT (IF): GREEN 12 mA TYP. at VF=5V  
 DOMINANT WAVELENGTH (λ D): YELLOW 588 nm TYP. At VF=5V  
 FORWARD CURRENT (IF): YELLOW 13 mA TYP. at VF=5V
- ⚠️ TE CONNECTIVITY LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN, DATE CODE: "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK, WITH SUNDAY=1
- 7. 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.

Dimension	Color	Green	Yellow	Green/Orange	Orange	Part Number
.100±.010	GREEN/YELLOW	NO	GREEN	NO	NO	2-6605814-5
.145±.010	GREEN	NO	GREEN/ORANGE	NO	NO	1-6605814-8
.145±.010	YELLOW	NO	GREEN/ORANGE	NO	NO	1-6605814-5
.145±.010	GREEN/ORANGE	NO	YELLOW	NO	NO	1-6605814-3
.145±.010	GREEN	YES	GREEN	YES	YES	1-6605814-1
.145±.010	GREEN	NO	YELLOW	NO	NO	6605814-8
.145±.010	GREEN/YELLOW	NO	GREEN/YELLOW	NO	NO	6605814-6
.145±.010	GREEN/YELLOW	NO	GREEN	NO	NO	6605814-5
.145±.010	GREEN/YELLOW	NO	GREEN	YES	YES	6605814-4
.145±.010	YELLOW	YES	GREEN	YES	YES	6605814-2
.145±.010	GREEN	YES	YELLOW	YES	YES	6605814-1
DIM 'A'	LED1	250 OHMS RESISTOR	LED2	250 OHMS RESISTOR		PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT. DWG: CLOUD,ZENG 29MAY2006  
 DWG: MICHAEL,ZHANG 29MAY2006  
 APVD: TEDDY,XIONG 29MAY2006  
 PRODUCT SPEC: 108-2100  
 APPLICATION SPEC: 108-2100

**STE** TE Connectivity

1X1 MAG45(TM), MODULAR JACK, 7G4 SCHEMATIC, 05 SERIES GIGABIT CIRCUIT, SHIELDED, WITH LEADS

SIZE: A1 CAGE CODE: 00779 DRAWING NO: 6605814 RESTRICTED TO: H  
 WEIGHT: - SCALE: NTS SHEET 1 OF 1 REV: H