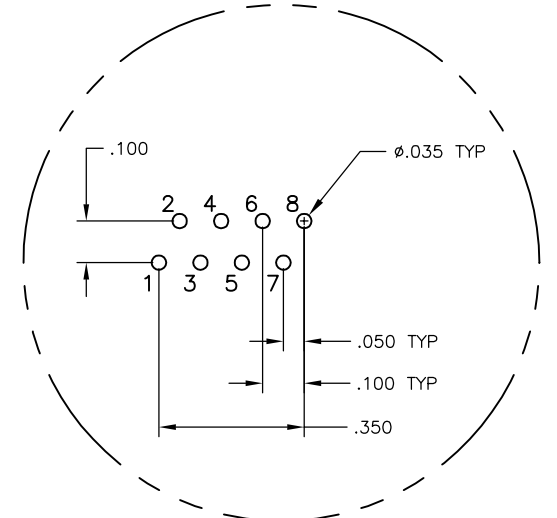
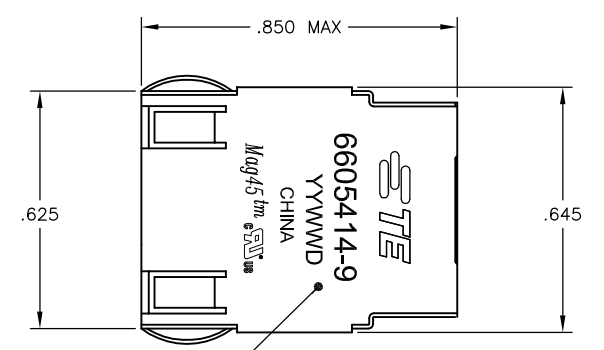
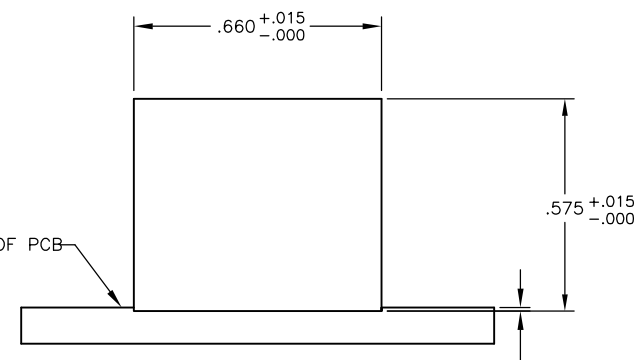
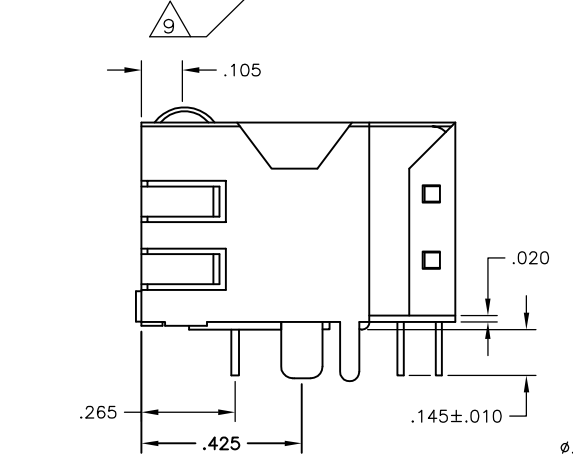
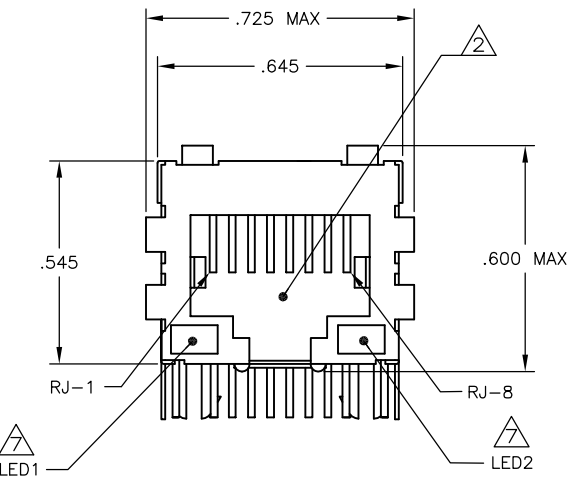


LOC		DIST		REVISIONS			
AA	00	REV	DATE	BY	APP'D	DESCRIPTION	DATE
D		ECO-11-014921	02DEC2011	JC	KZ		

MECHANICAL:



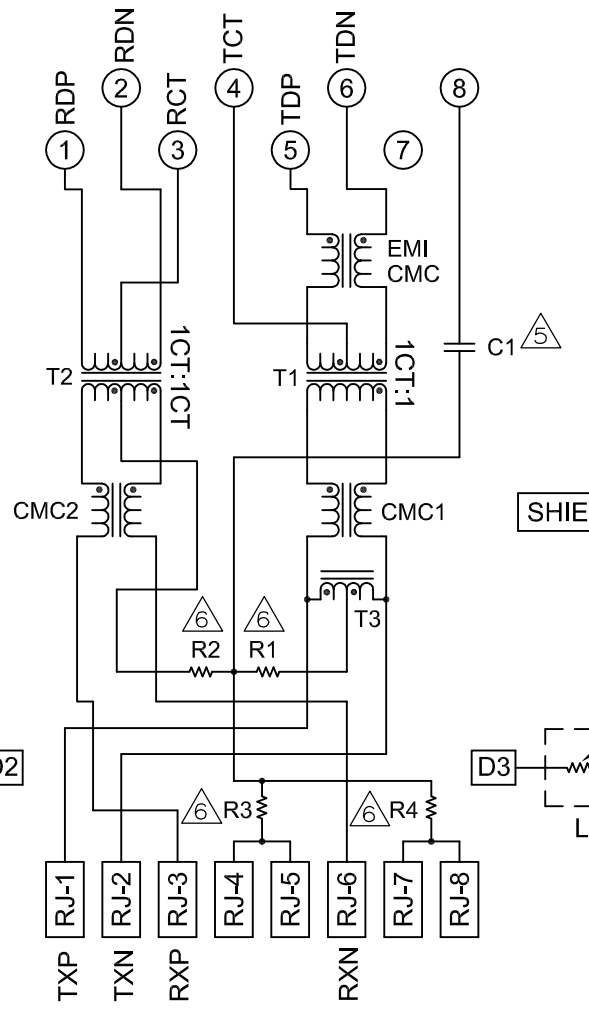
Pin Designations



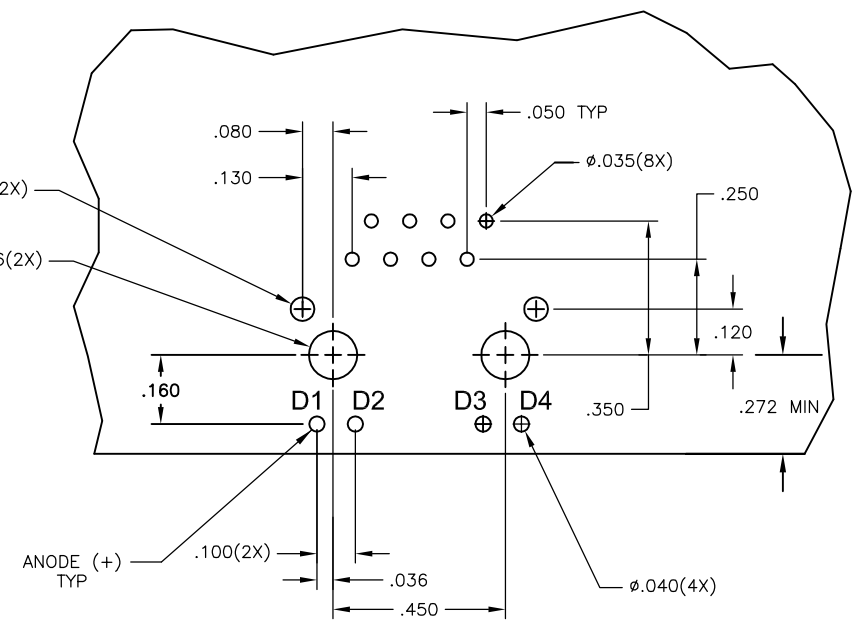
Suggested Panel Cutout

ELECTRICAL:

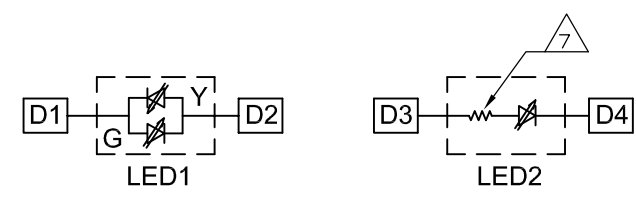
417 SERIES MAGNETIC CIRCUIT



R1-R4 = 75 OHMS, 1/16 W, 5% RESISTORS
 C1 = 1000 pF, 2kV DECOUPLING CAPACITOR



**Suggested PCB Layout
(Component Side)**



**LED CONFIGURATION
FOR 5-6605414-4 ONLY**

- MATERIALS:**
 HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0.
 SHIELD - .010" THICK, C26800 BRASS PREPLATED WITH 30μinch SEMI-BRIGHT NICKEL; SOLDER TABS POST-DIPPED WITH 100μinch MIN SAC SOLDER.
 MOD JACK CONTACTS - .0157" x .018" THICK, 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 PREPLATED 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**
 -APPLICATION: 10/100 BASE-T
 -IMPEDANCE: 100 OHMS
 -TURNS RATIO (CHIP-CABLE): TX = 1:1, RX = 1:1
 -OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, TX AND RX
 -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 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: 2250 VDC FOR 60 SECONDS DURATION.
4. OPERATING TEMPERATURE: FROM 0°C - +70°C.
- C1 IS AN OPTIONAL. IF NO CAPACITOR, TRACE IS CONTINUOUS.
- ALL DIMENSIONS NOMINAL UNLESS OTHERWISE NOTED.
- THE 250 OHM RESISTOR IS OPTIONAL, PLEASE SEE CHART FOR PRESENCE OR ABSENCE OF LED RESISTORS.
 IF LEDS WITHOUT 250 OHM RESISTOR, LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20 mA
 LED COLOR: DOMINANT WAVELENGTH (AD): GREEN 568 nm TYP @ IF=20 mA
 FORWARD VOLTAGE (VF): GREEN 2.2V TYP @ IF=20 mA
 DOMINANT WAVELENGTH (AD): YELLOW 588 nm TYP @ IF=20 mA
 FORWARD VOLTAGE (VF): YELLOW 2.1V TYP @ IF=20 mA
 DOMINANT WAVELENGTH (AD): ORANGE 605 nm TYP @ IF=20 mA
 FORWARD VOLTAGE (VF): ORANGE 2.1V TYP @ IF=20 mA
 IF 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 13mA TYP @ VF=5V
- INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE ASYMMETRICAL, AND THEREFORE DO NOT SUPPORT AUTO-MDI/MDIX.
- TE CONNECTIVITY LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.
10. THESE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK WAVE SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX.
- OBsolete PARTS: OBSOLETE CIS STREAMLINING PER D.RENAUD/D.SINISI

LED RESISTOR	DECOUPLING CAPACITOR	LED1	LED2	PART NUMBER
YES	YES	GREEN	GREEN	6-6605414-4
NO	YES	GREEN	GREEN	5-6605414-7
YES	YES	GREEN/YELLOW	GREEN	5-6605414-4
YES	YES	GREEN	YELLOW	5-6605414-1
NO	NO	YELLOW	GREEN	6605414-9

THIS DRAWING IS A CONTROLLED DOCUMENT. DATE: 18JAN05
 BY: R.GRZYBOWSKI
 CHK: D.FAROLE
 DATE: 18JAN05
 PRODUCT SPEC: 108-2100
 APPLICATION SPEC: 108-2100

1X1 MAG45(TM) MODULAR JACK, 4N2 SCHEMATIC, 417 MAGNETIC CIRCUIT, SHIELDED, OPTIONAL DECOUPLING CAPACITOR, WITH LEDS

SIZE: A1 CASE CODE: 00779 DRAWING NO: 6605414 RESTRICTED TO: -
 MATERIAL: - FINISH: - WEIGHT: - SCALE: NTS SHEET 1 OF 1 REV: D