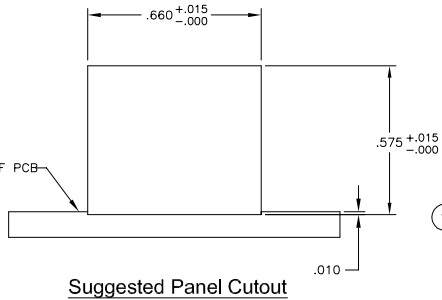
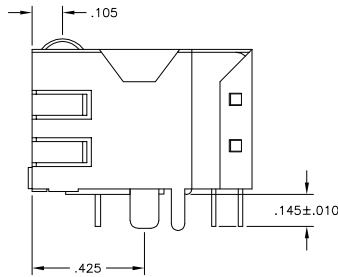
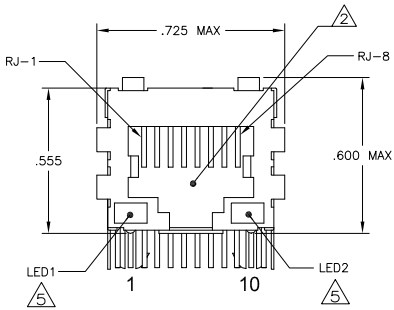
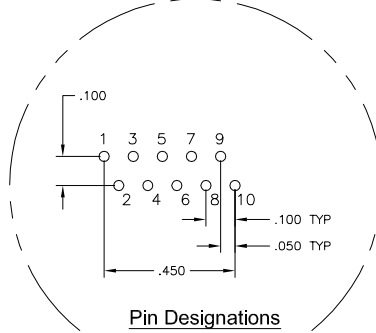
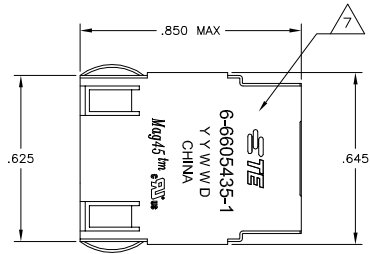
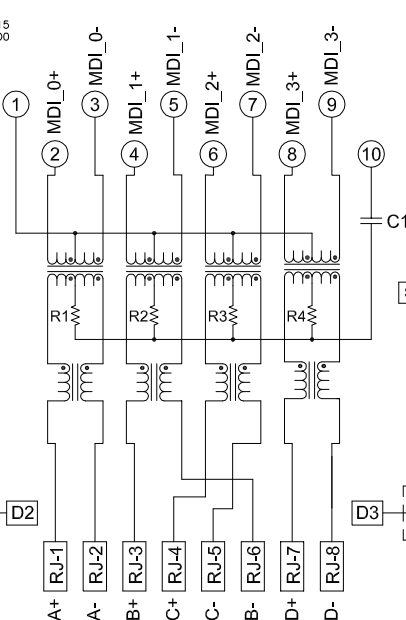


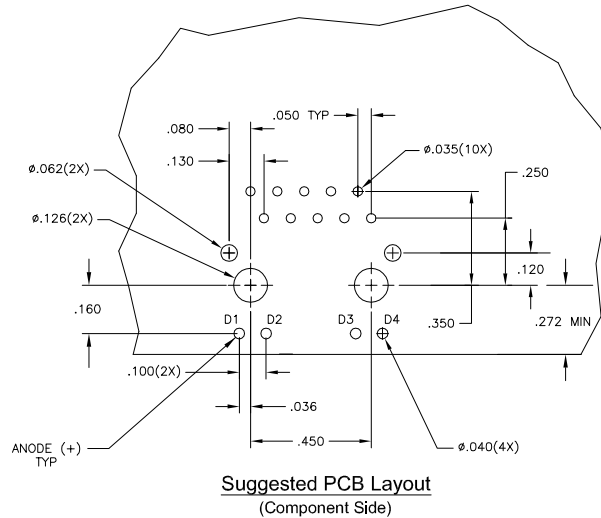
MECHANICAL:



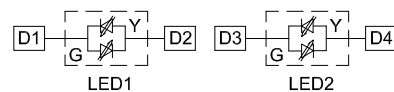
4G01P1 GIGABIT MAGNETIC CIRCUIT



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



Suggested PCB Layout (Component Side)



LED CONFIGURATION FOR 5-6605435-6 ONLY

- △ MATERIALS:
 HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0
 SHIELD - .010" THICK C26800 BRASS PREPLATED WITH 30 INCH SEMI-BRIGHT NICKEL. SOLDER TABS POST DIPPED WITH 100 INCH MIN SAC SOLDER.
 MOD JACK CONTACTS - 0.0157 X 0.018" PHOSPHOR BRONZE, 50 INCH MIN OVERALL NICKEL UNDERPLATE, WITH SELECT 50 INCH MIN HARD GOLD FINISH PLATE SOLDER TABS WITH 100 INCH 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 80 INCH SILVER OVER 40 INCH NICKEL UNDERPLATE OVER 40 INCH COPPER UNDERPLATE. POST-PLATED WITH 100 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
 -IMPEDANCE: 100 OHMS
 -TURNS RATIO (CHP:CABLE): 1:1 ALL FOUR PAIRS
 -OPEN CIRCUIT INDUCTANCE (OCL): 350 nH MIN @100MHz, 0.1VRMS,
 8mA DC BIAS FROM 0°C TO 70°C, ALL FOUR PAIRS
 -ALL FOUR PAIRS BI-DIRECTIONAL
 -PERFORMANCE @ 25°C
 INSERTION LOSS (IL): 1.6dB MAX FROM 0.5MHz TO 100MHz
 RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 40MHz
 12-20LOG(I/F)dB MIN FROM 4.0MHz TO 100MHz
 CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz
 33-20LOG(I/F)dB MIN FROM 4.0MHz 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.
- 4. OPERATING TEMPERATURE: FROM 0° TO -70°C.
- △ THE 250 OHM 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 (λD): GREEN 568 nm TYP. ∴ IF=20mA
 FORWARD VOLTAGE (VF): GREEN 2.2V TYP. ∴ IF=20mA
 DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP. ∴ IF=20mA
 FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. ∴ 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 (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
- △ THE MAGNETICS ARE SYMMETRICAL, AND SUPPORT AUTO-MDI/MDIX.
- △ TE CONNECTIVITY LOGO TE CONNECTIVITY 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 260C MAX, 10 SECONDS MAX.

YES	GREEN	YES	GREEN	YES	6-6605435-1
YES	GREEN	NO	YELLOW	NO	5-6605435-8
YES	GREEN/YELLOW	NO	GREEN/YELLOW	NO	5-6605435-6
YES	GREEN	YES	YELLOW	YES	5-6605435-1
DECOUPLING CAPACITOR	LED1	250 OHMS RESISTOR	LED2	250 OHMS RESISTOR	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		REV. ATTADIA - 02MAR2005		REV. FAROLE - 02MAR2005	
DIMENSIONS: INCHES		REV. ATTADIA - 02MAR2005		REV. FAROLE - 02MAR2005	
0 P.C.	± .010	NAME: 1X1 MA645(TM) MODULAR JACK (10 PIN HORIZ), 4G1P1 SCHEMATIC, 4G01P1 GIGABIT CIRCUIT, DECOUPLING CAPACITOR, WITH LEDS		RESTRICTED TO	
1 P.C.	± .010	PRODUCT SPEC: 108-2100		SCALE: 1:1	
2 P.C.	± .010	APPLICATION SPEC:		SHEET 1 OF 1	
3 P.C.	± .010	SIZE: 100779		REV D	
4 P.C.	± .010	DRAWING NO: C-6605435			
MATERIAL:	FINISH:	WEIGHT:			
CUSTOMER DRAWING		SCALE: 1:1		SHEET 1 OF 1	