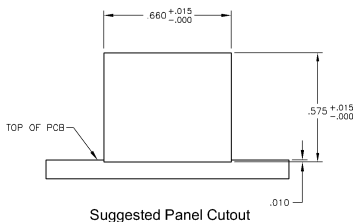
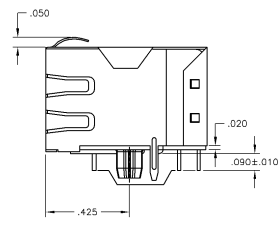
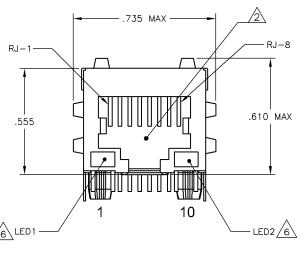
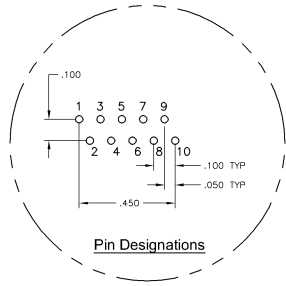
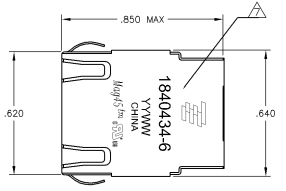
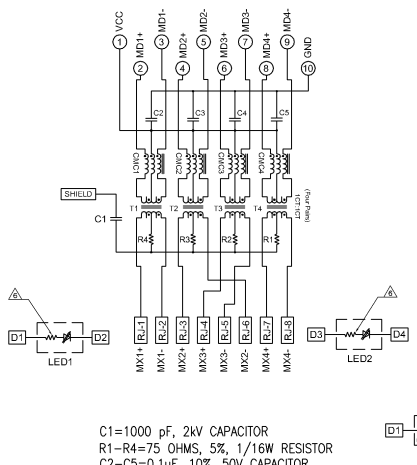


MECHANICAL:

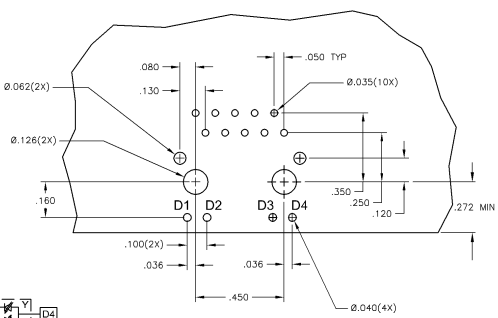
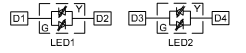


ELECTRICAL:

4G46P1 GIGABIT CIRCUIT



C1=1000 pF, 2KV CAPACITOR
 R1-R4=75 OHMS, 5%, 1/16W RESISTOR
 C2-C5=0.1uF, 10%, 50V CAPACITOR



- △ MATERIALS
 - HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0
 - SHIELD - .008" THICK, (26800 BRASS PREPLATED WITH 30uINCH SEMI-BRIGHT NICKEL, SOLDER TABS POST DIPPED WITH 100uINCH MIN SAC SOLDER
 - MOD JACK CONTACTS - 0.0157 X 0.018" PHOSPHOR BRONZE, 50uINCH MIN OVERALL NICKEL UNDERPLATE, WITH SELECT 50uINCH MIN HARD GOLD FINISH PLATE
 - SOLDER TAILS WITH 100uINCH MIN MATTE TIN AND/OR SAC SOLDER DIP
 - LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, 0200" X 0200" CARBON STEEL WIREFRAME LEADS PRE-PLATED WITH 80uINCH SILVER OVER 40uINCH NICKEL UNDERPLATE OVER 40uINCH COPPER UNDERPLATE, POST-PLATED WITH 100uINCH 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 (IMP CABLE) 1:1 ALL FOUR PAIRS
 - OPEN CIRCUIT INDUCTANCE (OCL) 350pH MIN @ 0.5MHz, 0.1VRMS, 5mADC 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
 - 12-20 DGI(780)dB MIN FROM 4.0MHz TO 100MHz
 - CROSSTALK ATTENUATION 35dB MIN FROM 0.5MHz TO 40MHz
 - 33-20 DGI(750)dB MIN FROM 4.0MHz TO 100MHz
 - COMMON MODE REJECTION RATIO (CMRR) 30dB MIN FROM 0.5MHz TO 100MHz
 - ISOLATION VOLTAGE, COMPLIES WITH IEEE802.3 2002, PARA 4.8.6.1.1, ITEM b
- 4. OPERATING TEMPERATURE FROM 0°C TO +70°C
- △ THE MAGNETICS ARE SYMMETRIC, AND SUPPORT AUTO-MDI/MDIX
- △ 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 (λD) GREEN 568 nm TYP @ IF=20 mA
- FORWARD VOLTAGE (VF) GREEN 2.2V TYP @ IF=20 mA
- DOMINANT WAVELENGTH (λD) YELLOW 588 nm TYP @ IF=20 mA
- FORWARD VOLTAGE (VF) YELLOW 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 (λD) GREEN 568 nm TYP @ VF=5V
- FORWARD CURRENT (IF) GREEN 12mA TYP @ VF=5V
- DOMINANT WAVELENGTH (λD) YELLOW 588 nm TYP @ VF=5V
- FORWARD CURRENT (IF) YELLOW 13mA TYP @ VF=5V
- △ 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 140°C, 120 SECONDS TO 180 SECONDS, PEAK WAVE SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX.

| GREEN | YES | GREEN | YES | 1-1840434-1 |
|--------------|-------------------|--------------|-------------------|-------------|
| YELLOW | NO | YELLOW | NO | 1-1840434-0 |
| YELLOW | NO | GREEN | NO | 1840434-9 |
| GREEN | NO | YELLOW | NO | 1840434-8 |
| GREEN | NO | GREEN | NO | 1840434-7 |
| GREEN/YELLOW | NO | GREEN/YELLOW | NO | 1840434-6 |
| GREEN/YELLOW | NO | GREEN | NO | 1840434-5 |
| GREEN/YELLOW | NO | GREEN | YES | 1840434-4 |
| YELLOW | YES | YELLOW | YES | 1840434-3 |
| YELLOW | YES | GREEN | YES | 1840434-2 |
| GREEN | YES | YELLOW | YES | 1840434-1 |
| LED 1 | 250 OHMS RESISTOR | LED 2 | 250 OHMS RESISTOR | PART NUMBER |

THIS DRAWING IS A CONTROLLED DOCUMENT

| REVISION | DATE | DESCRIPTION | BY | CHKD | APP'D |
|----------|----------|--|-------------|-------------|-------------|
| 1 | 10-01-07 | INITIAL DESIGN | [signature] | [signature] | [signature] |
| 2 | 10-01-07 | REVISED TO ADD SHIELDING | [signature] | [signature] | [signature] |
| 3 | 10-01-07 | REVISED TO ADD LED RESISTORS | [signature] | [signature] | [signature] |
| 4 | 10-01-07 | REVISED TO ADD PCB LAYOUT | [signature] | [signature] | [signature] |
| 5 | 10-01-07 | REVISED TO ADD MECHANICAL DRAWING | [signature] | [signature] | [signature] |
| 6 | 10-01-07 | REVISED TO ADD ELECTRICAL SCHEMATIC | [signature] | [signature] | [signature] |
| 7 | 10-01-07 | REVISED TO ADD LED CONFIGURATION | [signature] | [signature] | [signature] |
| 8 | 10-01-07 | REVISED TO ADD MAGNETIC SPECIFICATIONS | [signature] | [signature] | [signature] |
| 9 | 10-01-07 | REVISED TO ADD OPERATING TEMPERATURE | [signature] | [signature] | [signature] |
| 10 | 10-01-07 | REVISED TO ADD WAVE SOLDERING PROCESS | [signature] | [signature] | [signature] |

111 MAC407(M) MODULAR JACK (10 PIN HORIZ), 4G46P1 GIGABIT CIRCUIT, SHIELDED WITH LEADS

SIZE 1 ONE SIDE (HORIZ TO)

REF TO 00779 1840434

CUSTOMER DRAWING

DATE NTS SHEET 1 OF 8