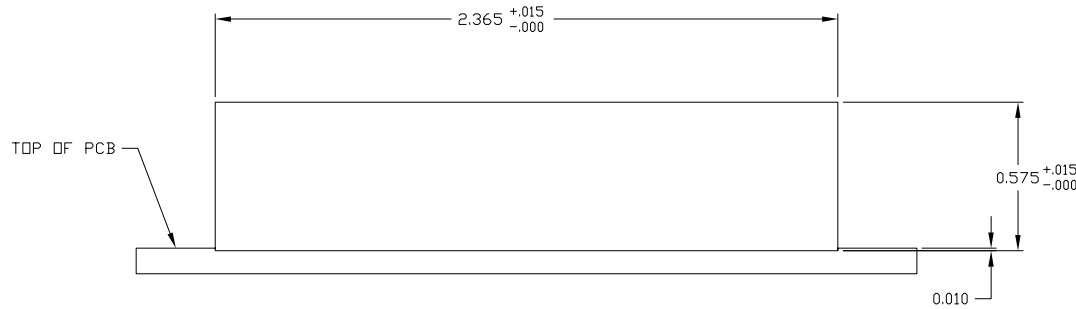
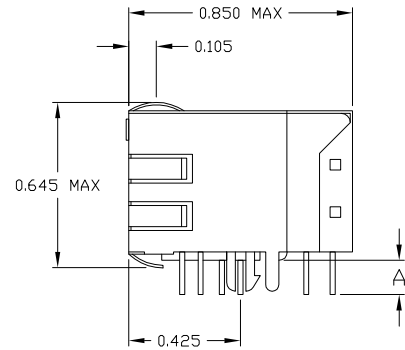
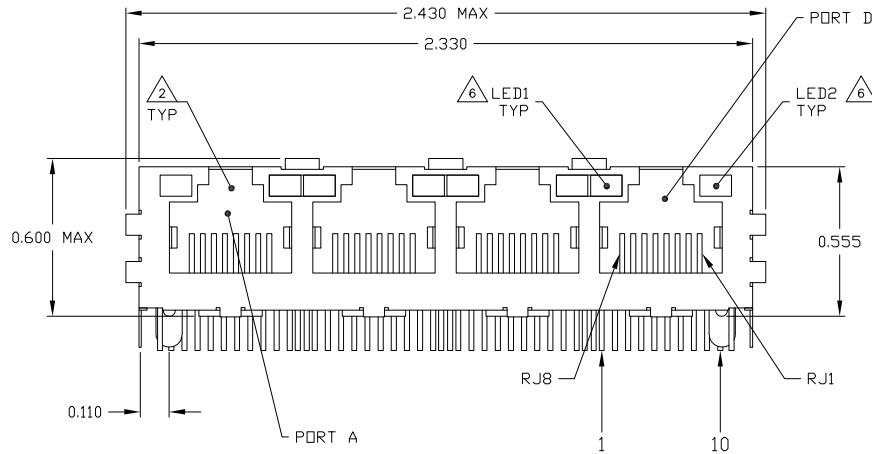
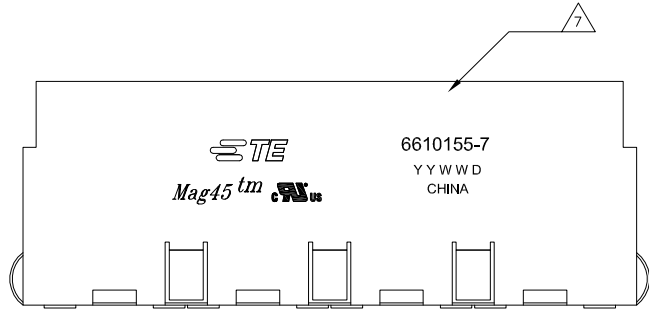


| LOC | DATE          | REVISIONS | DATE      | BY | APP |
|-----|---------------|-----------|-----------|----|-----|
| AA  | 22            |           |           |    |     |
| D   | ECO-08-030703 |           | 21NOV2008 | VL | LR  |
| E   | ECO-11-013427 |           | 20MAY2011 | EL | LR  |

MECHANICAL:



1X4 SUGGESTED PANEL CUTOUT

- 1 MATERIALS:
  - HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0.
  - SHIELD - 0.010" 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 TABS WITH 100µINCH MIN MATTE TIN AND/OR SAC SOLDER DIP.
  - LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, 0.020" X 0.020" CARBON STEEL WIREFRAME LEADS PRE-PLATED WITH 80µINCH SILVER OVER 40µINCH NICKEL UNDERPLATE OVER 40µINCH COPPER UNDERPLATE. POST-PLATED WITH 100µIN MIN MATTE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP.

- 2 RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB PART F.

- 3 MAGNETICS
  - IMPEDANCE: 100 OHMS
  - TURNS RATIO (CHIP: CABLE): 1:1 ALL FOUR PAIRS
  - OPEN CIRCUIT INDUCTANCE (OCL): 350µH 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 4.0MHZ
    - 33-20\*LOG(f/50)dB MIN FROM 4.0.1MHZ 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 AND WITH ALL PORTS CONNECTED.

- 4 OPERATING TEMPERATURE: FROM 0°C TO +70°C.
- 5 INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL TO SUPPORT AUTO-MDI/MDIX.
- 6 LEDs WITHOUT BUILT-IN 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): ORANGE 605 nm TYP @ IF=20 mA
  - FORWARD VOLTAGE (VF): ORANGE 2.1V TYP @ IF=20 mA

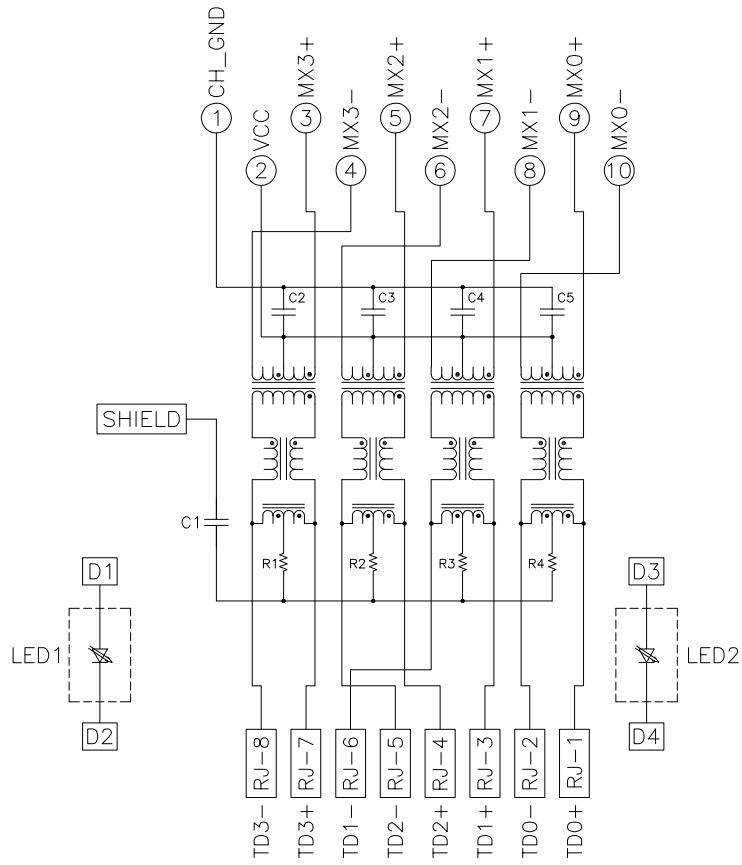
- 7 TE CONNECTIVITY LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.

- 8 THESE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK WAVE SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX.

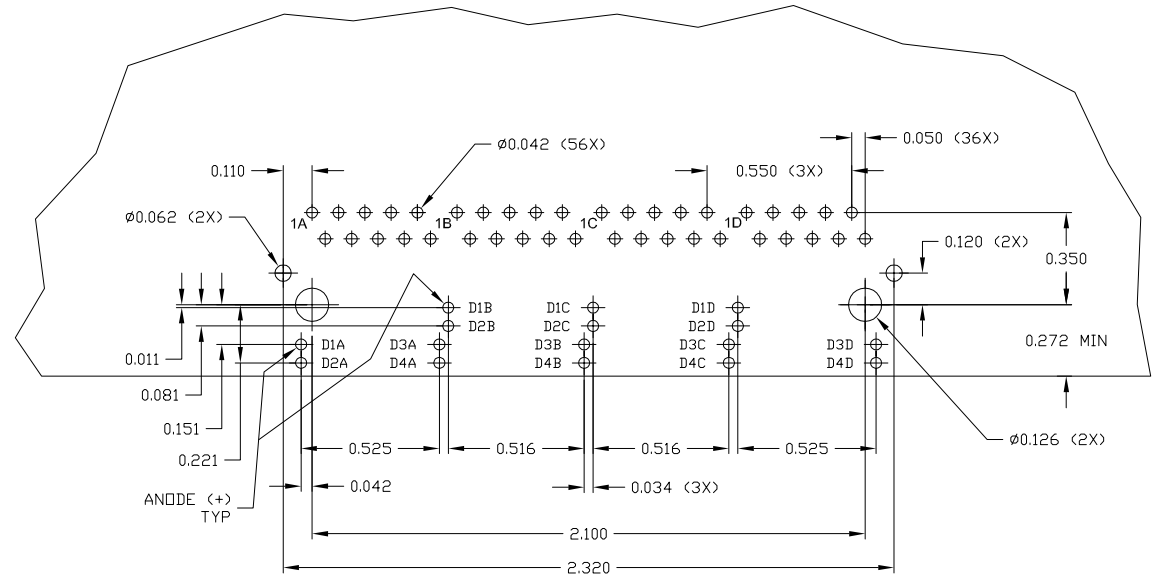
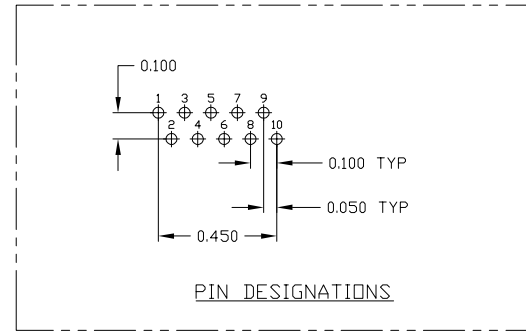
|             |       |        |             |
|-------------|-------|--------|-------------|
| 0.160±0.010 | GREEN | GREEN  | 1-6610155-5 |
| 0.145±0.010 | GREEN | ORANGE | 1-6610155-2 |
| 0.145±0.010 | GREEN | GREEN  | 6610155-7   |
| DIM "A"     | LED1  | LED2   | PART NUMBER |

| DIMENSIONS: |                         | REV. ATTADIA - 10/20/2008 |            | TE Connectivity  |  |
|-------------|-------------------------|---------------------------|------------|--|--|
| INCHES      | NO DIMENSIONS SPECIFIED | REV. 1                    | 10/20/2008 | 1X4 MAG45(TW) MODULAR JACK, 704 SCHEMATIC, (10 PIN HORIZ), 7005 GIGABIT MAGNETIC CIRCUIT, SHIELDED, S2 PCB GROUND TABS, WITH LEADS |  |
| 0.160       | ± 0.010                 | REV. 2                    | 10/20/2008 | 108-2100   |  |
| 0.145       | ± 0.010                 | REV. 3                    | 10/20/2008 |  |  |
| 0.145       | ± 0.010                 | REV. 4                    | 10/20/2008 |  |  |
| MATERIAL    | FINISH                  | REV. 5                    | 10/20/2008 |  |  |
|             |                         | REV. 6                    | 10/20/2008 |  |  |
|             |                         | REV. 7                    | 10/20/2008 |  |  |
|             |                         | REV. 8                    | 10/20/2008 |  |  |
|             |                         | REV. 9                    | 10/20/2008 |  |  |
|             |                         | REV. 10                   | 10/20/2008 |  |  |
|             |                         | REV. 11                   | 10/20/2008 |  |  |
|             |                         | REV. 12                   | 10/20/2008 |  |  |
|             |                         | REV. 13                   | 10/20/2008 |  |  |
|             |                         | REV. 14                   | 10/20/2008 |  |  |
|             |                         | REV. 15                   | 10/20/2008 |  |  |
|             |                         | REV. 16                   | 10/20/2008 |  |  |
|             |                         | REV. 17                   | 10/20/2008 |  |  |
|             |                         | REV. 18                   | 10/20/2008 |  |  |
|             |                         | REV. 19                   | 10/20/2008 |  |  |
|             |                         | REV. 20                   | 10/20/2008 |  |  |
|             |                         | REV. 21                   | 10/20/2008 |  |  |
|             |                         | REV. 22                   | 10/20/2008 |  |  |
|             |                         | REV. 23                   | 10/20/2008 |  |  |
|             |                         | REV. 24                   | 10/20/2008 |  |  |
|             |                         | REV. 25                   | 10/20/2008 |  |  |
|             |                         | REV. 26                   | 10/20/2008 |  |  |
|             |                         | REV. 27                   | 10/20/2008 |  |  |
|             |                         | REV. 28                   | 10/20/2008 |  |  |
|             |                         | REV. 29                   | 10/20/2008 |  |  |
|             |                         | REV. 30                   | 10/20/2008 |  |  |
|             |                         | REV. 31                   | 10/20/2008 |  |  |
|             |                         | REV. 32                   | 10/20/2008 |  |  |
|             |                         | REV. 33                   | 10/20/2008 |  |  |
|             |                         | REV. 34                   | 10/20/2008 |  |  |
|             |                         | REV. 35                   | 10/20/2008 |  |  |
|             |                         | REV. 36                   | 10/20/2008 |  |  |
|             |                         | REV. 37                   | 10/20/2008 |  |  |
|             |                         | REV. 38                   | 10/20/2008 |  |  |
|             |                         | REV. 39                   | 10/20/2008 |  |  |
|             |                         | REV. 40                   | 10/20/2008 |  |  |
|             |                         | REV. 41                   | 10/20/2008 |  |  |
|             |                         | REV. 42                   | 10/20/2008 |  |  |
|             |                         | REV. 43                   | 10/20/2008 |  |  |
|             |                         | REV. 44                   | 10/20/2008 |  |  |
|             |                         | REV. 45                   | 10/20/2008 |  |  |
|             |                         | REV. 46                   | 10/20/2008 |  |  |
|             |                         | REV. 47                   | 10/20/2008 |  |  |
|             |                         | REV. 48                   | 10/20/2008 |  |  |
|             |                         | REV. 49                   | 10/20/2008 |  |  |
|             |                         | REV. 50                   | 10/20/2008 |  |  |
|             |                         | REV. 51                   | 10/20/2008 |  |  |
|             |                         | REV. 52                   | 10/20/2008 |  |  |
|             |                         | REV. 53                   | 10/20/2008 |  |  |
|             |                         | REV. 54                   | 10/20/2008 |  |  |
|             |                         | REV. 55                   | 10/20/2008 |  |  |
|             |                         | REV. 56                   | 10/20/2008 |  |  |
|             |                         | REV. 57                   | 10/20/2008 |  |  |
|             |                         | REV. 58                   | 10/20/2008 |  |  |
|             |                         | REV. 59                   | 10/20/2008 |  |  |
|             |                         | REV. 60                   | 10/20/2008 |  |  |
|             |                         | REV. 61                   | 10/20/2008 |  |  |
|             |                         | REV. 62                   | 10/20/2008 |  |  |
|             |                         | REV. 63                   | 10/20/2008 |  |  |
|             |                         | REV. 64                   | 10/20/2008 |  |  |
|             |                         | REV. 65                   | 10/20/2008 |  |  |
|             |                         | REV. 66                   | 10/20/2008 |  |  |
|             |                         | REV. 67                   | 10/20/2008 |  |  |
|             |                         | REV. 68                   | 10/20/2008 |  |  |
|             |                         | REV. 69                   | 10/20/2008 |  |  |
|             |                         | REV. 70                   | 10/20/2008 |  |  |
|             |                         | REV. 71                   | 10/20/2008 |  |  |
|             |                         | REV. 72                   | 10/20/2008 |  |  |
|             |                         | REV. 73                   | 10/20/2008 |  |  |
|             |                         | REV. 74                   | 10/20/2008 |  |  |
|             |                         | REV. 75                   | 10/20/2008 |  |  |
|             |                         | REV. 76                   | 10/20/2008 |  |  |
|             |                         | REV. 77                   | 10/20/2008 |  |  |
|             |                         | REV. 78                   | 10/20/2008 |  |  |
|             |                         | REV. 79                   | 10/20/2008 |  |  |
|             |                         | REV. 80                   | 10/20/2008 |  |  |
|             |                         | REV. 81                   | 10/20/2008 |  |  |
|             |                         | REV. 82                   | 10/20/2008 |  |  |
|             |                         | REV. 83                   | 10/20/2008 |  |  |
|             |                         | REV. 84                   | 10/20/2008 |  |  |
|             |                         | REV. 85                   | 10/20/2008 |  |  |
|             |                         | REV. 86                   | 10/20/2008 |  |  |
|             |                         | REV. 87                   | 10/20/2008 |  |  |
|             |                         | REV. 88                   | 10/20/2008 |  |  |
|             |                         | REV. 89                   | 10/20/2008 |  |  |
|             |                         | REV. 90                   | 10/20/2008 |  |  |
|             |                         | REV. 91                   | 10/20/2008 |  |  |
|             |                         | REV. 92                   | 10/20/2008 |  |  |
|             |                         | REV. 93                   | 10/20/2008 |  |  |
|             |                         | REV. 94                   | 10/20/2008 |  |  |
|             |                         | REV. 95                   | 10/20/2008 |  |  |
|             |                         | REV. 96                   | 10/20/2008 |  |  |
|             |                         | REV. 97                   | 10/20/2008 |  |  |
|             |                         | REV. 98                   | 10/20/2008 |  |  |
|             |                         | REV. 99                   | 10/20/2008 |  |  |
|             |                         | REV. 100                  | 10/20/2008 |  |  |

7G05 SERIES GIGABIT CIRCUIT



C1 = 1000pF, 2kV DECOUPLING CAPACITOR  
 R1-R4 = 75 OHMS, 1/16W RESISTORS  
 C2-C5 = 0.1µF, 10%, 50V, X7R CAPACITORS



SUGGESTED PCB LAYOUT  
 (Component Side)

|  |  |   |            |            |           |              |
|--|--|---|------------|------------|-----------|--------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT. |  | REV. 01   | DATE       | 10/20/2005 | BY        | ATTADIA      |
| DRAWN BY: 01/20/05                     |  | CHK. 01/20/05   | DATE       | 10/20/2005 | BY        | FAROLE       |
| APPROVED BY: 01/20/05                  |  | DATE  | 10/20/2005 | NAME       | D. FAROLE |              |
| PRODUCT SPEC                           |  | 1X4 MAG45(TM) MODULAR JACK, 704 SCHEMATIC (10 PIN HORIZ), 7G05 GIGABIT MAGNETIC CIRCUIT, SHIELDED, S2 PCB GROUND TABS, WITH LEADS |            |            |           |              |
| APPLICATION SPEC                       |  | 108-2100  |            |            |           |              |
| MATERIAL                               |  | SIZE  | A1         | QAGE CODE  | C=6610155 | DRAWING NO   |
| FINISH                                 |  | WEIGHT  |            | SCALE      | 4:1       | SHEET 2 of 2 |
| CUSTOMER DRAWING                       |  | REV E   |            |            |           |              |