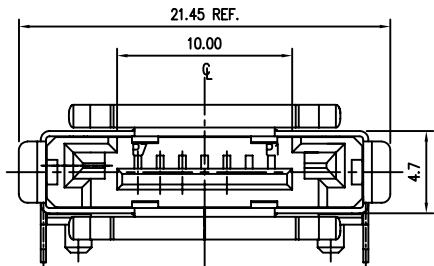


RECOMMENDED PCB LAYOUT  
TOLERANCE: ±0.05mm



|     |                            |       |           |
|-----|----------------------------|-------|-----------|
| I   | ADDED TAPE REEL OPTION     | FOX   | 12/13/10' |
| H   | REVISE DRAWING             | AXL   | 11/9/10'  |
| G   | REVISE DRAWING             | VEGAS | 3/1/10'   |
| F   | ADD AND REVISE NOTES       | AXL   | 5/4/06'   |
| E   | ADD PCB CUTOUT             | AXL   | 5/3/06'   |
| D   | CORRECT DRAWING            | AXL   | 4/27/06'  |
| C   | CHANGED SOLDERTAIL WAS 0.5 | AXL   | 4/25/06'  |
| B   | ADD 6. RoHS Complaint      | AXL   | 2/14/06'  |
| A   | ISSUED                     | AXL   | 4/15/05'  |
| REV | ECN NO.                    | NAME  | DATE      |

| TOLERANCE |        |
|-----------|--------|
| LINEAR    | ANGLES |
| X.±       | X'.±   |
| .X±0.38   | .X'±   |
| .XX±0.25  | .XX'±  |
| .XXX±0.15 | .XXX'± |

**GENESIS TECHNOLOGY, INC**  
1015 GRANT STREET S.E.  
ATLANTA, GA 30315

APPD: \_\_\_\_\_ MAT'L: \_\_\_\_\_  
 CHKD: \_\_\_\_\_ FINISH: \_\_\_\_\_  
 DRWN: AXL Q'TY: \_\_\_\_\_

|   |       |                  |     |
|---|-------|------------------|-----|
| TITLE: SATA 7P MALE SMT CONN., SMT TYPE |       |                  |     |
| PART NO. G ESAR-1607-BKX3X01            |       | DWG NO. SC-10044 |     |
| UNITS                                   | SCALE | SHEET            | REV |
| MM                                      | NONE  | 1 OF 2           | I   |

**G** Notes:

1. Electrical:
  - a. Voltage Rating: 500V AC/DC(r.m.s)
  - b. Current Rating: 1.5Amperes.
  - c. Insulation Resistance: 1000M ohms min.
  - d. Dielectric Withstand Voltage: 500V AC/1 min.
  - e. Contact Resistance: 30 m ohms max initial.
2. Mechanical:
  - a. Material:  
Contacts: Brass.  
Housing/Flammability Rating: LCP+30%G/F,UL94V-0  
Shell: Brass.
  - b. Plating:  
Contacts: Gold plated Optional.  
100u" tin Min. Plated at solder side, 30u" nickel Min. underplated overall.  
Shell: 50u" nickel Min.
  - c. Durability: 2,500 Cycles.
  - d. Mating force: 40N Max.  
Unmating force: 10N Min.
  - e. Coplanarity of SMT Leads: 0.15mm
  - f. Solderability: More than 95% of solderable area shall be covered with solder after 5~10 seconds flux(No clean flux)deep.
  - g. Soldering Profile: 260°C±5°C for 5 seconds without remarkable deterioration.
3. Environmental:
  - a. Operating/Storage Temperature: -40°C to +85°C.
  - b. High Temperature Life: A temperature of 85±5°C for 96hours;
  - c. Cold Temperature Life: A temperature of -40±5°C for 96hours;
  - d. Salt Spray test shall be tested per ASTM 117 for 48 hours.
  - e. Temperature Cycling: 10 cycles of -55±5°C to 85±5°C
  - f. Steady State Humidity: 90%~95% humidity on 40±3°C for 96hours.
  - g. Thermal Shock: 10 cycles of -55±5°C to 85±5°C
  - h. Vibration: No discontinuities of 1us of longer duration when mated eSATA conn. are subjected to 5.35Gs RMS. 15min. in each of three mutually perpendicular planes.
  - i. Resistance to Soldering Heat: Can resistance 260°C±5°C for 60±3 seconds
  - j. After enviromental test, connector contact resistance should not increase to 45m ohms Max. and meet IR and DWV as initial.
4. Compliance:
  - a. Standard: compliance to SATA 2.6
  - b. RoHS 6/6 Compliant.

**G** ORDER INFORMATION

ESAR - 16 07 - B K X 3 X 01

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

1. CONNECTOR:  
ESAR: eSATA
  2. TYPE:  
16: MALE SMT TYPE
  3. POSITIONS:  
07: 7 POSITIONS
  4. INSULATOR MATERIAL:  
B: LCP
  5. INSULATOR COLOR:  
K: BLACK
  6. CONTACT PLATING:  
1: GOLD FLASH  
5: 15u" GOLD  
6: 30u" GOLD
  7. SHIELD PLATING:  
3: NICKEL PLATING
  8. PACKING  
T: TRAY PACKING
- I** R: TAPE REEL

|        |             |
|--------|-------------|
| SHEET  | REV         |
| 2 OF 2 | SEE SHEET 1 |