


RECOMMENDED PCB LAYOUT  
 TOLERANCE: ±0.02  
 TOP VIEW( THICKNESS: 1.0 mm )

[E]	ADD NOTES & COLOER OPTION	Vegas	6/04/08'	TOLERANCE		 <small>1015 GRANT STREET S.E. ATLANTA, GA 30315</small> a Genesis Electro-Mechanical Company		TITLE: USB A LONG SHELL FLAG TYPE			
[D]	MODIFY BACK SHELL	Kevin	5/29/07'	LINEAR	ANGLES			PART NO. USB-AR155-XXX			
[C]	ADD LOGO AND SPECIFY MAT'L	AXL	4/30/07'	X. ±	X° ±			DWG NO. GTI07-30010			
[B]	CHANGE DESIGN	AXL	4/27/07'	..X ± 0.40	..X° ±	APPD:	MAT'L:	UNITS	SCALE	SHEET	REV
[A]	ISSUED	AXL	4/6/07'	..XX ± 0.30	..XX° ±	CHKD:	FINISH:	MM	NONE	1 OF 2	E
REV	ECN NO.	NAME	DATE	..XXX ± 0.20	..XXX° ±	DRWN: AXL	Q'TY:				

**[E]** Notes:

1. Electrical:

- a. Voltage Rating: 30VDC Max. (r.m.s)
- b. Current Rating: 1.5Amperes.
- c. Insulation Resistance: 1000M ohms min.
- d. Dielectric Withstand Voltage: AC 500V/1 minute.
- e. Contact Resistance: 30 m ohms max initial.
- f. Contact Capacitance: 2pf max per unmated contact.

2. Mechanical:

- a. Material:
  - Contacts: Phosphor Bronze C5191-H.
  - Housing/Cover/Flammability Rating: PA9T,UL94V-0, Color option(see order information).
  - Shell: Brass.
  - Back Shell: SPCC.
  - Finger: SUS.
- b. Plating:
  - Contacts: Gold plated Optional (see order information).
  - 100u" TIN MIN. Plated at solder side, 50u" nickel underplated overall.
  - Shell/Back Shell: 100u" TIN MIN. Plated overall.
  - Finger: None-Plated.
- c. Durability: USB 1,500 Cycles.
- d. Mating force: 35N Max.  
Unmating force: 10N Min.
- e. Coplanarity of SMT Leads: Not Applicable.
- 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 5~10 seconds without remarkable deterioration.

3. Environmental:

- a. Operating/Storage Temperature: -40°C to +85°C.
- b. Temperature Life: A temperature of 60±5°C for 96hours.
- c. Salt Spray test shall be tested per ASTM 117 for 4 hours.
- d. Steady State Humidity: 90%~95% humidity on 40±3°C for 96hours.
- e. Thermal Shock: 10 cycles of -55±5°C to 85±5°C.
- f. Shock: No discontinuities of 1 us or longer duration when mated USB connectors are subjected to 11 ms duration 30 Gs half-sine shock pulses. Three shocks in each direction applied along three mutually perpendicular planes for a total of 18 shocks.
- g. Vibration: No discontinuities of 1us of longer duration when mated USB conn. are subjected to 5.35Gs RMS. 15min. in each of three mutually perpendicular planes.  
to 50m ohms max. and meet IR and DWV as initial.
- h. After enviromental test, connector contact resistance should not increase

4. Compliance:

- a. Standard: USB version 2.0 specification.
- b. RoHS Compliance.

Order Information:

USB-AR155-XX X

**[E]**

Housing & Cover Color Option:

W: White

B: Black

Contact Pin Plated:

S1: 1u" S4: 10u"

S2: 3u" S5: 15u"

S3: 5u" S6: 30u"

Tooling series

Receptacle

USB A Type

PART NO.	USB-AR155-XXX	SHEET	REVISION
DWG NO.	GTI07-30010	2 OF 2	SEE SHEET 1