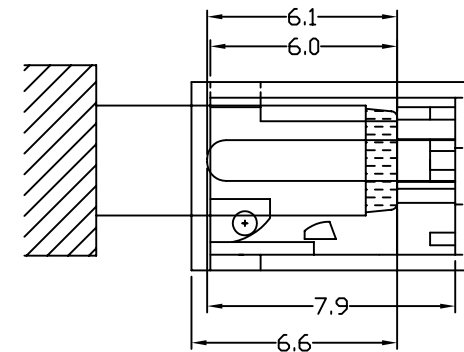
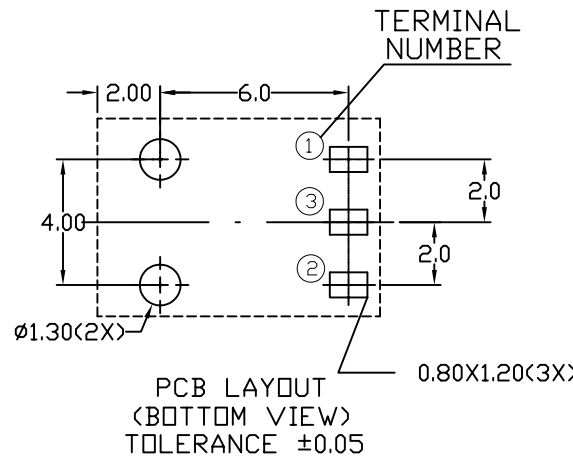
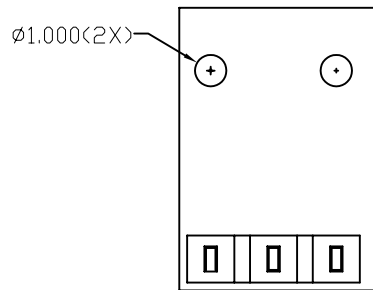


| SCHEMATIC | |
|---------------|---------|
| | ③ |
| | ② |
| | ① |
| DIA. PART NO. | |
| 1.0 ϕ | DC225-A |
| 1.3 ϕ | DC225-B |



| TOLERANCE | |
|-----------------|-------------|
| LINEAR | ANGLES |
| X \pm | X' \pm |
| .XX ± 0.15 | .XX' \pm |
| .XXX ± 0.05 | .XXX' \pm |



| | | | | | |
|----------|-------|---------------|--------|-----|--|
| TITLE: | | DC POWER JACK | | | |
| PART NO. | | DC225-X | | | |
| DWG NO. | | GTI09-30050 | | | |
| | UNITS | SCALE | SHEET | REV | |
| | MM | NONE | 1 OF 3 | B | |

| REV | ADD NOTES | NAME | DATE | TOLERANCE | TOLERANCE | APPD: | MAT'L: | DWG NO. | UNITS | SCALE | SHEET | REV |
|-----|-----------|--------|----------|-----------------|-------------|-----------|---------|---------|-------|-------|-------|-----|
| [B] | ADD NOTES | Hanson | 3/6/09' | .X ± 0.25 | .X' \pm | | | | | | | |
| [A] | ISSUED | AXL | 3/22/06' | .XX ± 0.15 | .XX' \pm | CHKD: | FINISH: | | | | | |
| REV | ECN NO. | NAME | DATE | .XXX ± 0.05 | .XXX' \pm | DRWN: AXL | Q'TY: | | | | | |

NOTES:

1. GENERAL SCOPE

THIS SPECIFICATION COVERS THE GENERAL REQUIREMENTS OF THE DC POWER JACK, CLASS 2, APPLIED ON AUDIO SYSTEMS AND OTHER RELATED ELECTRONIC APPARATUS. ESPECIALLY THIS SPECIFICATION APPLIED ON THE NORMAL PLASTIC FOR THE THROUGH HOLE SOLDERING PROCESS.

MATED PLUG

THE MATED PLUG SHOULD COMPLIED WITH STANDARD PLUG AS SHOWN IN THE DRAWING ATTACHED.

2. MECHANICAL

2a. TERMINAL STRENGTH

THE TERMINALS SHALL BE CAPABLE OF WITHSTANDING A FORCE OF 500 GRAMS APPLIED IN ANY DIRECTION FOR 10 SECONDS WITHOUT LOOSING OR BREAKDOWN, EXCEPT BENDING THE TERMINALS.

2b. INSERTION AND EXTRACTION FORCE

INSERTION FORCE

INITIAL CONDITION :0.3 Kgs TO 3.0 Kgs

AFTER LIFE TEST :0.2 Kgs TO 3.0 Kgs

AFTER HUMIDITY TEST :0.2 Kgs TO 3.0 Kgs

AFTER HEAT TEST :0.2 Kgs TO 3.0 Kgs

AFTER COLD TEST :0.2 Kgs TO 3.0 Kgs

AFTER RESISTANCE TO SOLDERING HEAT TEST :0.2 Kgs TO 3.0 Kgs

EXTRACTION FORCE

INITIAL CONDITION :0.3 Kgs TO 3.0 Kgs

AFTER LIFE TEST :0.2 Kgs TO 3.0 Kgs

AFTER HUMIDITY TEST :0.2 Kgs TO 3.0 Kgs

AFTER HEAT TEST :0.2 Kgs TO 3.0 Kgs

AFTER COLD TEST :0.2 Kgs TO 3.0 Kgs

AFTER RESISTANCE TO SOLDERING HEAT TEST

3. ELECTRICAL

3a. WITHSTAND VOLTAGE TEST

250 VOLTS AC/RMS OF COMMERCIAL FREQUENCY 50 TO 60 Hz APPLIED BETWEEN ADJACENT OPEN TERMINALS FOR 1 MINUTE WITHOUT BREAKDOWN

3b. INSULATION RESISTANCE

THE INSULATION RESISTANCE BETWEEN MUTUAL INSULATED CONTACTS SHOULD COMPLIED WITH FOLLOWING SPECIFICATION UNDER 250 VOLTS DC(METHOD C UNLESS OTHERWISE SPECIFIED)

INITIAL CONDITION

AFTER LIFE TEST :100 MΩ MIN.

AFTER HEAT TEST :100 MΩ MIN.

AFTER COLD TEST :100 MΩ MIN.

AFTER RESISTANCE TO SOLDERING HEAT TEST :100 MΩ MIN.

AFTER HUMIDITY TEST :50 MΩ MIN.

(NOTE : THE MATED PLUG USED TO THIS MEASUREMENT SHALL BE ALLOWED TO CLEAN AND REMOVE OXIDATION FILM ON THE SURFACE BEFORE TEST)

3c. CONTACT RESISTANCE

CONTACT RESISTANCE OF JACK SHALL NOT EXCEED THE VALUE DEFINED IN THE TABLE LISTED AT A CURRENT LESS THAN 1.0 Amp. DC BY FOUR TERMINALS METHOD

INITIAL CONDITION :PLUG TO CONTACTS 50 mΩ MAX. / CONTACT TO SHUNT 30 mΩ MAX.


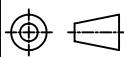
AFTER HUMIDITY TEST :PLUG TO CONTACTS 50 mΩ MAX. / CONTACT TO SHUNT 30 mΩ MAX.

AFTER HEAT TEST :PLUG TO CONTACTS 50 mΩ MAX. / CONTACT TO SHUNT 30 mΩ MAX.

AFTER COLD TEST :PLUG TO CONTACTS 50 mΩ MAX. / CONTACT TO SHUNT 30 mΩ MAX.

AFTER RESISTANCE TO SOLDERING HEST TEST :PLUG TO CONTACTS 50 mΩ MAX. / CONTACT TO SHUNT 30 mΩ MAX.

(NOTE : THE MATED PLUG USED TO THIS MEASUREMENT SHALL BE ALLOWED TO CLEAN AND REMOVE OXIDATION FILM ON THE SURFACE BEFORE TEST.

| | | | | TOLERANCE | |  <small>1015 GRANT STREET S.E. ATLANTA, GA 30315</small> | | TITLE: DC POWER JACK | | | | |
|-----|-----------|--------|----------|-----------|--------|--|---------|---|-------|-------|--------|-----|
| | | | | LINEAR | ANGLES | | | PART NO. DC225-X | | | | |
| | | | | X.± | X'± | | | DWG NO. GTI09-30050 | | | | |
| [B] | ADD NOTES | Hanson | 3/6/09' | .X±0.25 | .X'± | APPD: | MAT'L: |  | UNITS | SCALE | SHEET | REV |
| [A] | ISSUED | AXL | 3/22/06' | .XX±0.15 | .XX'± | CHKD: | FINISH: | | MM | NONE | 2 OF 3 | B |
| REV | ECN NO. | NAME | DATE | .XXX±0.05 | .XXX'± | DRWN: AXL | Q'TY: | | | | | |

4. ENDURANCE

DURABILITY TEST

THE DURABILITY TEST SHALL CONSIST OF 5000 MATING CYCLES OF INSERTION AND EXTRACTION WITH THE MATED PLUG OR THE GAUGE PLUG AT A RATE 10 ~ 20 CYCLES PER MINUTE, NO LOAD CONDITION, WITH OR WITHOUT LUBRICANT WHICH SHOULD BE SPECIFIED THE DETAIL REQUIREMENT. THE PERFORMANCE OF THE JACK BEFORE AND AFTER THIS TEST SHOULD COMPLY WITH PARAGRAPHS 2b AN 3c.

MEASURING CONDITION

ALL MEASUREMENTS AND TEST SHALL BE MADE AT A TEMPERATURE 10°C TO 35°C WITH A RELATIVE HUMIDITY OF 45%RH TO 85%RH UNDER STANDARD ATMOSPHERIC PRESSURE UNLESS OTHERWISE SPECIFIED CONDITIONS.

5. ENVIRONMENT

5a. HUMIDITY TEST

THE JACK SHALL BE PLACED IN THE TESTING CHAMBER AT THE CONDITION OF 40°C ± 2°C AND THE RELATIVE HUMIDITY OF 90% TO 95% RH FOR 96 Hrs, THE DEW DROPS ON THE SURFACE OF JACK SHALL BE BLOWN OFF AND REMOVED FROM THE SURFACE OF JACK AND THEN PLACED IN AMBIENT TEMPERATURE FOR MORE THAN 30 MINUTES, RECOVERY PERIOD. THE RELATIVE TEST BEFORE AND AFTER THIS TEST SHOULD COMPLY WITH PARAGRAPH 3a AND 3b.

5b. HEAT TEST

THE JACK SHALL BE PLACED IN THE TESTING CHAMBER AT A TEMPERATURE OF 70°C ± 2°C AND THE RELATIVE HUMIDITY OF LESS THAN 50%RH FOR 96 Hrs AND THEN PLACED IN AMBIENT TEMPERATURE FOR MORE THAN 30 MINUTES, RECOVERY PERIOD. THE RELATIVE TEST BEFORE AND AFTER THIS TEST SHOULD COMPLY WITH PARAGRAPH 3c.

5c. COLD TEST

THE JACK SHALL BE PLACED IN THE TESTING CHAMBER AT A TEMPERATURE OF -40°C ± 2°C AND THE RELATIVE HUMIDITY OF LESS THAN 50%RH FOR 96 Hrs AND THEN PLACED IN AMBIENT TEMPERATURE FOR MORE THAN 30 MINUTES, RECOVERY PERIOD. THE RELATIVE TEST BEFORE AND AFTER THIS TEST SHOULD COMPLY WITH PARAGRAPH 3c.

6. SOLDERING TEST

6a. SOLDERABILITY

THE TERMINAL OF JACK TESTED SHALL BE DIPPED INTO SOLDERING FLUX OR EQUIVALENT FOR A PERIOD OF 5 TO 10 SECONDS AND THEN IMMersed INTO MOLTEN SOLDER, Sn, AT A CONTROLLED TEMPERATURE OF 265°C ± 5°C FOR 3 ± 0.5 SECONDS AFTER AGING. THE COVERAGE SHOULD MORE THAN 95% BY THE MICROSCOPE OF MORE THAN 10X.

6b. RESISTANCE TO SOLDERING HEAT

THE TERMINALS OF THE JACK SHOULD BE IMMersed INTO MOLTEN SOLDER, Sn, AT A CONTROLLED TEMPERATURE OF 265°C ± 5°C FOR 5 ± 1 SECONDS. THE RELATIVE TEST AFTER THIS TEST SHOULD COMPLY WITH PARAGRAPH 3c. THE OUTLOOK OF THE JACK SHOULD HAVE NO REMARKABLE DETERIORATION.

7. OPERATING TEMPERATURE

THE RANGE : -25 TO +85°C

8. RATING

RATED VOLTAGE : 5.0 VOLTS DC

RATED CURRENT : 3.5 AMPERES DC

9. MATERIAL AND FINISH

PLASTIC HOUSING<P1>: PA (HIGH TEMP), BLACK, UL94V-0

PLASTIC COVER<P2>: PA (HIGH TEMP), BLACK, UL94V-0

SPRING CONTACT<M1>: COPPER ALLOY, Tin 30T

SHUNT TERMINAL<M2>: COPPER ALLOY, Tin 30T

CENTER PIN<M3>: COPPER ALLOY, Tin 30T

| TOLERANCE | |
|-----------|--------|
| LINEAR | ANGLES |
| X.± | X'± |



TITLE: DC POWER JACK

PART NO. DC225-X

DWG NO. GTI09-30050

| REV | ADD NOTES | NAME | DATE | TOLERANCE LINEAR | TOLERANCE ANGLES | APPD: | MAT'L: | CHKD: | FINISH: | DRWN: | Q'TY: | UNITS | SCALE | SHEET | REV |
|-----|-----------|--------|----------|------------------|------------------|-------|--------|-------|---------|-------|-------|-------|-------|--------|-----|
| [B] | | Hanson | 3/6/09' | .X±0.25 | .X'± | | | | | | | MM | NONE | 3 OF 3 | B |
| [A] | ISSUED | AXL | 3/22/06' | .XX±0.15 | .XX'± | | | | | | | | | | |
| REV | ECN NO. | NAME | DATE | .XXX±0.05 | .XXX'± | AXL | | | | | | | | | |

