

A

B

C

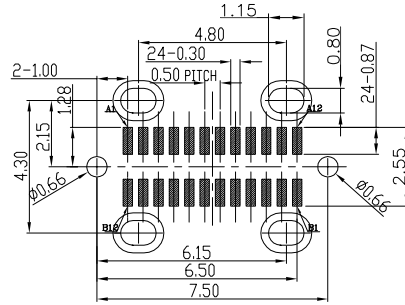
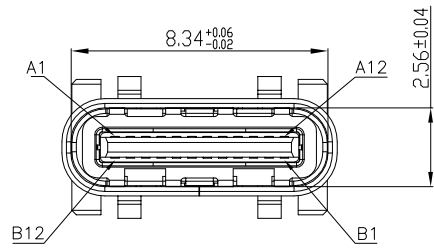
D

E

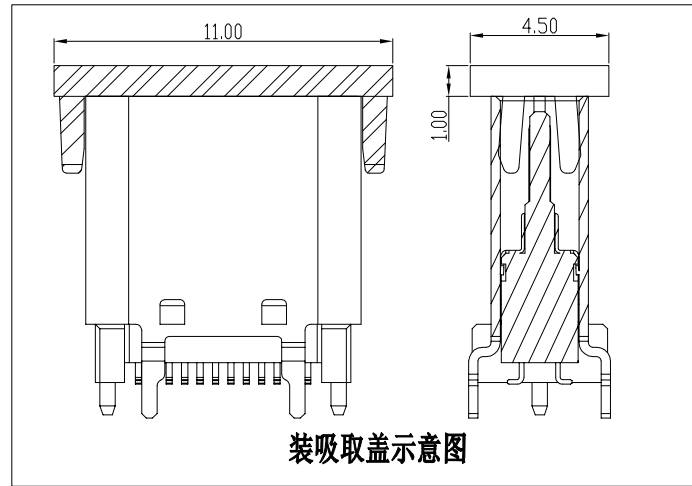
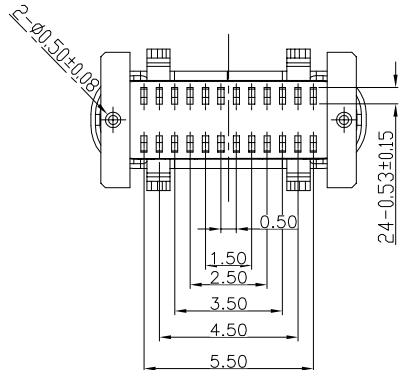
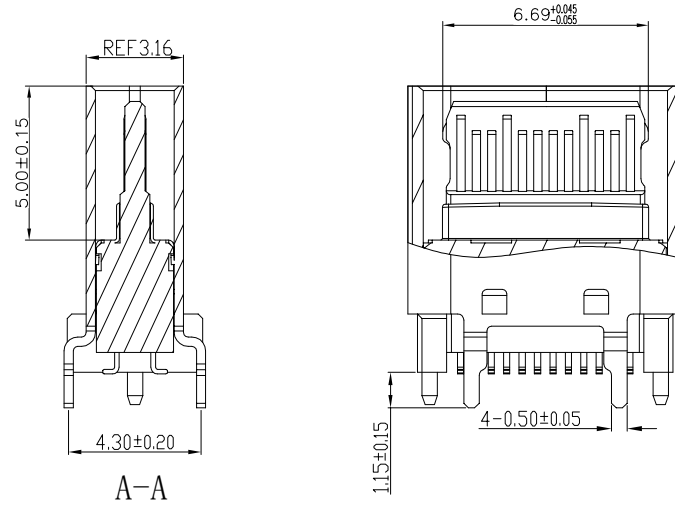
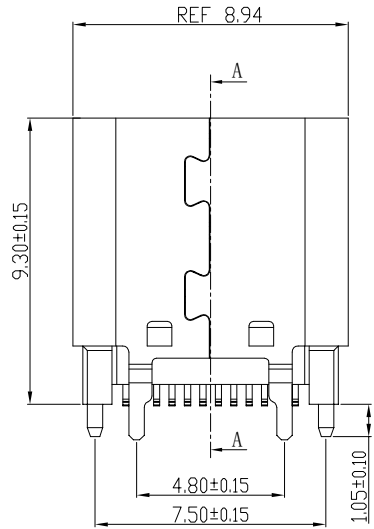
F

G

H



RECOMMENDED P.C.B. LAYOUT (T:1.00mm)  
TOLERANCE UNSPECIFIED ±0.05mm



装吸取盖示意图

| 版次 | 工程变更单号 | 基本描述 | 日期 | 修订 |
|----|--------|------|----|----|
|    |        |      |    |    |
|    |        |      |    |    |

备注:

1. 材质:

1.1 胶芯: LCP+30%G.F UL94V-0

1.2 端子: 高导电C7025, T=0.15mm;

1.3 外壳: SUS304, T=0.30mm;

1.4 中夹片: SUS301, T=0.15mm;

2. 主要特性:

2.1 额定电压: 20V

2.2 额定电流: 5A

2.3 接触阻抗: 40mΩ MAX (初始值)  
50mΩ MAX (测试后)

2.4 绝缘阻抗: 100MΩ MIN

2.5 耐压测试: 100V AC R.M.S.

2.6 整体插入力: 5-20N 整体插入力: 5-20N (耐久后)  
整体拔出力: 8-20N 整体拔出力: 5-20N (耐久后)

2.7 耐久: 10000次

2.8 耐高温: SMT回流焊 (峰值260° ±5°), 塑胶不能有起泡,  
融胶等不良, 变色, 翘曲变形在公差范围以内;

2.9 产品须做焊锡测试, 粘锡面积达到95%以上;

3.0 盐雾测试: 48H MIN

3.1 工作温度: -30℃ ~ +80℃

| PIN NUMBER | SIGNAL NAME | PIN NUMBER | SIGNAL NAME |
|------------|-------------|------------|-------------|
| A1         | GND         | B12        | GND         |
| A2         | SSTXp1      | B11        | SSRXp1      |
| A3         | SSTXn1      | B10        | SSRXn1      |
| A4         | VBUS        | B9         | VBUS        |
| A5         | CC1         | B8         | SBU2        |
| A6         | Dp1         | B7         | Dn2         |
| A7         | Dn1         | B6         | Dp2         |
| A8         | SBU1        | B5         | CC2         |
| A9         | VBUS        | B4         | VBUS        |
| A10        | SSRXn2      | B3         | SSTXn2      |
| A11        | SSRXp2      | B2         | SSTXp2      |
| A12        | GND         | B1         | GND         |



深圳市首韩科技有限公司

|                                                        |                    |     |    |     |    |     |
|--------------------------------------------------------|--------------------|-----|----|-----|----|-----|
| 品名规格                                                   | TTYPE-C 24P LTH9.3 |     |    |     | 设计 | 李春风 |
| 未注公差:<br>.000 ±0.10<br>.00 ±0.20<br>.0 ±0.30<br>角度 ±1° | 料号                 |     |    |     | 审核 | 钟华华 |
|                                                        | 图纸类型               | 成品图 | 比例 | 1:1 | 核准 | 罗孝金 |
|                                                        | 视角                 |     | 版本 | A/0 | 单位 | MM  |



深圳市首韩科技有限公司

SHENZHEN SHOUHAN TECHNOLOGY CO., LTD

Tel: 0755-27597601 Fax: 0755-27597491

## 承 认 书

### SPECIFICATION FOR APPROVAL

产 品 编 码  
Material code:

\_\_\_\_\_

产品名称 Project:

TYPE-C

\_\_\_\_\_

规格型号 Part No:

TYPE-C 24P LTH9.3

\_\_\_\_\_

贵公司承认印 Approval signatures

| 料 号/Part No. | 签 章/Signatures |
|--------------|----------------|
|              |                |

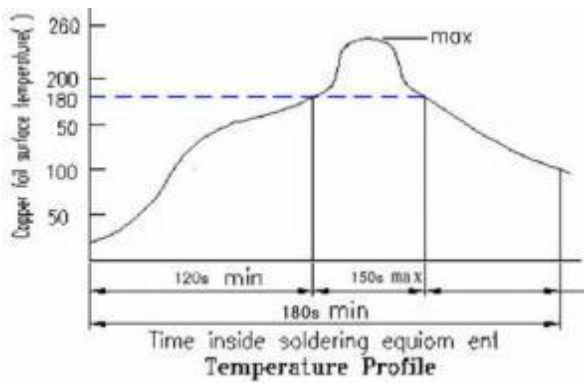
日期 Date:

|             |     |                                                                                      |
|-------------|-----|--------------------------------------------------------------------------------------|
| 拟制/Drawn    | 李春风 |  |
| 审核/Check    | 钟华华 |                                                                                      |
| 批准/Approved | 罗孝金 |                                                                                      |

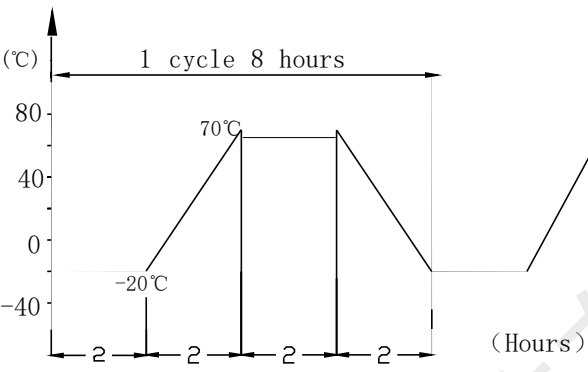
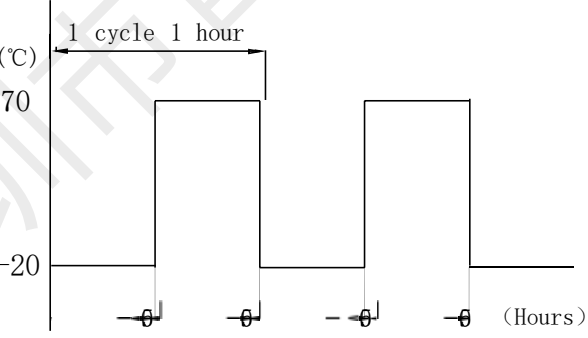


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|                                          |                                 |                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                         |
|------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RATING（额定值）                              |                                 | 5 A                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                         |
| PRACTICAL TEMPERATURE RANGE<br>使用温度范围    |                                 | -30℃~80℃<br>在-30℃~80℃温度内使用                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                         |
| STANDARD ATMOSPHEIC CONDITIONS<br>测试标准状况 |                                 | UNLESS OTHERWISE SPECIFIED<br>THE STANDARD RANGE OF ATMOSPHERIC CONDITIONS FOR MAKING MEASUREMENTS AND TESTS ARE AS FOLLOWS:<br>(1) BETWEEN BODY AND CONDUCTOR: 5。C TO 35℃<br>(2) BETWEEN CONDUCTORS NOT TO BE CONTACT: 45% TO 85%<br>(3) PRESSURE: 86Kpa TO 106Kpa<br>在没有指定的情况下测试温度、湿度、气压如下：<br>(1) 温度为 5℃~35℃<br>(2) 湿度为 45%~85%<br>(3) 气压为 86 Kpa~106Kpa |                                                                                                                                                                         |
| MECHANICAL（机械性能）                         |                                 |                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                         |
| ITEM 项目                                  |                                 | TEST CONDITIONS 测试条件                                                                                                                                                                                                                                                                                                                                        | PERFORMANCE 规格                                                                                                                                                          |
| 1                                        | CONNECTION FORCE<br>插入力度        | MEASUREMENT SHALL BE MADE AFTER CONNECTING AND DISCONNECTING USING STANDARD PLUG GAUGE 3 TIMES。<br>依据标准的 PLUG GAUGE 做第 3 次拔插后测定                                                                                                                                                                                                                             | 5~20N                                                                                                                                                                   |
|                                          | DISCONNECTI ON<br>FORCE<br>拔出力度 | MEASUREMENT SHALL BE MADE AFTER CONNECTING AND DISCONNECTING USING STANDARD PLUG GAUGE 3 TIMES。<br>依据标准的 PLUG GAUGE 做第 3 次拔插后测定                                                                                                                                                                                                                             | 8~20N                                                                                                                                                                   |
| 2                                        | TERMINAL STRENGTH<br>端子强度       | A STATIC LOAD OF 0.1N/m(1kgf/cm)SHALL BE APPLIED TO THE TIP OF THE TERMINAL FOR 1 MIN<br>IN ANY DIRECTION<br>向排脚先端的任意一个方向加 1 分钟 0.1N/m(1kgf/cm)的力度.                                                                                                                                                                                                         | THERE SHALL BE NO DAMAGE TO THE TERMINAL SUCH AS CRACKS, LOOSENESS OR PLAY ELECTRICAL ,AND MECHANICAL CHARACTERISTICS SHALL BE SATISFIED<br>在排脚中没有裂开、松动等异常， 满足 于机械、电气性能 |
| ELECTRICAL（电气性能）                         |                                 |                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                         |
| ITEM 项目                                  |                                 | TEST CONDITIONS 测试条件                                                                                                                                                                                                                                                                                                                                        | PERFORMANCE 规格                                                                                                                                                          |
| 3.1                                      | CONTACT RESISTANCE<br>接触电阻      | MEASURED AT SMALL CURRENT （100mA OR LESS）<br>1000Hz<br>在微小电流（100 m A）以下测试                                                                                                                                                                                                                                                                                   | 40mΩ MAX                                                                                                                                                                |
| 3.2                                      | INSULATION RESISTANCE<br>绝缘电阻   | APPLY A VOLTAGE OF 100V DC FOR 1 MIN TO FOLLOWING PORTIONS AFTER WHICH MEASUREMENT SHALL BE MADE:<br>(1) BETWEEN BODY AND CONDUCTOR<br>(2) BETWEEN CONDUCTORS NOT TO BE CONTACT<br>(3) BETWEEN CONDUCTORS NOT TO BE WHEN PLUG IS INSERTED DC100V 1 MIN<br>输入 100V DC 电压 1 分钟，按以下接触方法测试：<br>(1) 插座体与排脚之间<br>(2) 不接触的排脚之间<br>(3) 插头插入时不接触排脚之间                 | 100MΩ MIN                                                                                                                                                               |

|                 |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                   |
|-----------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.3             | DIELECTRIC STRENGTH<br>耐电压                 | <p>AC 100V 50~60Hz FOR 1 MIN TRIP CURRENT: 0.5mA</p> <p>(1) BETWEEN BODY AND CONDUCTOR</p> <p>(2) BETWEEN CONDUCTORS NOT TO BE CONTACT</p> <p>(3) BETWEEN CONDUCTORS NOT TO BE WHEN PLUG IS INSERTED DC 100V 1 MIN</p> <p>输入 AC 100V (50Hz) /min 电压 1 分钟感度电流为 0.5mA, 按以下接触方法测试:</p> <p>(1) 插座体与排脚之间</p> <p>(2) 不接触的排脚之间</p> <p>(3) 插头插入时不接触排脚之间</p>                                                                                                                                                                                                                                                                                                          | <p>WITHOUT DAMAGE TO PARTS ARCING OR BREAKDOWN ETC</p> <p>没有绝缘破坏等异常</p>                                                                           |
| URABILITY (耐久性) |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                   |
|                 | ITEM 项目                                    | TEST CONDITIONS 测试条件                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | PERFORMANCE 规格                                                                                                                                    |
| 4.1             | SOLDERABILITY TEST<br>可焊性试验                | <p>THE TOP OF THE TERMINALS SHALL BE DIPPED 1mm IN THE SOLDER BATH OF <math>250 \pm 5^{\circ}\text{C}</math> FOR <math>5 \pm 0.5</math> SECONDS</p> <p>端子顶部被浸入锡池中 1mm 深, 温度为 <math>250 \pm 5^{\circ}\text{C}</math>, 时间为 <math>5 \pm 0.5</math> 秒</p>                                                                                                                                                                                                                                                                                                                                                                                                        | <p>(1) SOLDER WETTING TIME SHALL BE 3 SEC OR LESS</p> <p>焊接时间应少于 3 秒</p> <p>(2) THE AREA OF SOLDERING SHOULD BE OVER 75%</p> <p>焊接面积应有 75% 以上</p> |
| 4.2             | RESISTANCE TO SOLDERING HEAT TEST<br>耐焊性试验 | <p>REFLOW SOLDERING CONDITIONS:</p> <p>PREHEAT: TEMPERATURE ON THE COPPER FOIL SURFACE SHOULD REACH <math>180^{\circ}\text{C}</math>. 120S AFTER THE P.C.B ENTERED INTO THE SOLDERING EQUIPMENT.</p> <p>TALLEST TEMPERATURE: TEMPERATURE ON THE COPPER FOIL SURFACE SHOULD REACH THE PEAK TEMPERATURE OF <math>260 \pm 5^{\circ}\text{C}</math> WITH IN 20 SECONDS.</p> <p>过回流焊条件:</p> <p>预热: 电镀层表面的温度应达到 <math>180^{\circ}\text{C}</math>, 120s 后电路板进入回流焊设备。</p> <p>最高温度: 电镀层表面温度最高为 <math>260 \pm 5^{\circ}\text{C}</math> 且停留不超过 20 秒。</p>  <p>Temperature Profile</p> | <p>WITHOUT DEFORMATION OF CASE OR EXCESSIVE LOOSENESS OF TERMINALS ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED</p> <p>本体无变形, 满足于机械、电气性能</p>     |

|      |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                             |
|------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4. 2 | RESISTANCE<br>TO<br>SOLDERING<br>HEAT TEST<br>耐焊性试验 | SOLDERING IRON METHOD:<br>BIT TEMPERATURE $330 \pm 5^{\circ}\text{C}$ APPLICATION<br>TIME OF SOLDERING IRON $3 \pm 0.5$ SEC<br>HOWEVER EXCESSIVE PRESSURE SHALL<br>NOT BE APPLIED TO THE TERMINAL<br>手焊接的时候温度需控制在 $330 \pm 5^{\circ}\text{C}$ ,时间<br>为 $3 \pm 0.5$ 秒,但不能在排脚上施加异常压力。                                                                                                                                                     | WITHOUT DEFORMATION OF CASE OR<br>EXCESSIVE LOOSENESS OF TEMINALS<br>ELECTRICAL CHARACTERISTICS SHALL<br>BE SATISFIED<br>本体无变形, 满足于机械、电气性能                                                                                                                  |
| 4. 3 | HUMIDITY<br>TEST<br>潮湿试验                            | THE JACK SHALL BE STORED ATA TEMPERATURE<br>OF $40 \pm 2^{\circ}\text{C}$ AND A HUMIDITY OF 90%TO 96% FOR<br>96 Hr, THEN THE JACK SHALL BE MAINTAINED<br>AT STANDARD ATMOSPHERIC CONDITION FOR 1 Hr<br>FOR OTHER PROCEDURES<br>放置 $40 \pm 2^{\circ}\text{C}$ 的相应湿度为 90~96% Hr 环境中 96 小时后,<br>再将样板放在正常环境中 1 小时后进行测试                                                                                                                      | THERE SHALL BE NO DAMAGE ON<br>APPEARANCE。<br>MECHANICAL AND ELECTRICAL<br>CHARACTERISTICS SHALL BE<br>SATISFIED<br>外观无异常, 满足于机械、电气性能。                                                                                                                      |
| 4.4  | HEAT TEST<br>耐热试验                                   | THE JACK SHALL BE STORED ATA TEMPERATURE<br>OF $70 \pm 2^{\circ}\text{C}$ FOR 96 HOURS, AND THEN IT SHALL<br>BE SUBJECTED TO THE CONTROLLED RECOVERY<br>MBASURBM<br>放置在温度 $70 \pm 2^{\circ}\text{C}$ 中测试 96 小时后, 再放置正常室温中 1<br>小时来测定                                                                                                                                                                                                    | THERE SHALL BE NO DAMAGE ON<br>APPEARANCE<br>MECHANICAL AND ELECTRICAL<br>CHARACTERISTICS SHALL BE<br>SATISFIED<br>外观无异常, 满足于机械、电气性能。                                                                                                                       |
| 4. 5 | COLD TEST<br>耐寒试验                                   | THE JACK SHALL BE STORED ATA TEMPERATURE<br>OF $-25 \pm 3^{\circ}\text{C}$ FOR 96 HOURS AND THEN IT SHALL<br>BE SUBJECTED TO THE CONTROLLED RECOVERY<br>CONDITIONS FOR 1 HOUR AFTER WHICH<br>放置在温度 $-25 \pm 3^{\circ}\text{C}$ 中 96 小时后, 再放置常温常湿中 1 小<br>时来测定                                                                                                                                                                           | THERE SHALL BE NO DAMAGE ON<br>APPEARANCE<br>MECHANICAL AND ELECTRICAL<br>CHARACTERISTICS SHALL BE<br>SATISFIED<br>外观无异常, 满足于机械、电气性能                                                                                                                        |
| 4. 6 | LIFE TEST<br>寿命试验                                   | WITHOUT LOAD<br>CONNECTION AND DISCONNECTION SHALL<br>BE MADE WITH THE MATING PLUGS AND<br>JACKS FOR 10000 CYCLES AT A SPEED<br>OF 10 TO 25 CYCLES/MIN<br>无负荷<br>将结合了的标准Plug(尽量要近于中心的)在1分<br>钟内以10-25的速度, 进行10000次插入, 拔出<br>LOAD:<br>AT RATING CONDITION (NON-INDUCTIVE LOAD)<br>CONNECTION AND DISCONNECTION SHALL<br>BE MADE 10000 CYCLES AT A SPEED<br>10 TO 20 CYCLES / MIN<br>负荷<br>以定格状态(无诱导负荷)在1 分钟内以10-20次<br>的速度进行 10000次插入、拔出 | (1) CONTACT RESISTANCE SHALL BE $\leq$<br>0.1 $\Omega$<br>(2) DISCONNECTION FORCE SHALL BE<br>0.8 TO 2.0N<br>(3) MECHANICAL AND ELECTRICAL<br>CHARACTERISTICS SHALL BE<br>SATISFIED<br>(1) 接触电阻 $\leq 0.1 \Omega$<br>(2) 拔出力是 0.8~2.0N<br>(3) 其它:满足于机械、电气性能 |

|     |                                               |                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                       |
|-----|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.7 | <p>TEMPERATURE CYCLING TEST</p> <p>温度循环测试</p> | <p>THE JACK SHALL BE SUB JECTED TO 5 CYCLES OF THE FOLLOWING CONDITIONS SHOWED IN THE FIGURE,AND THEN SHALL RETURNED ALLOWED TO REMAIN IN ROOM AMBIENT CONDITION FOR 30 MINUTES</p> <p>将插座以下列条件作 5 个循环， 然后放回室内环境 30 分钟</p> <p>Temp(°C)</p>        | <p>THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART.</p> <p>INSERTION &amp; EXTRACTION FORCE:3 TO 20N</p> <p>CONTACT RESISTANCE:MAX.30M Ω</p> <p>INSULATION RESISTANCE: MIN.100 M Ω</p> <p>DIELECTRIC WITHSTANDING VOLTAGE: 100VAC/MIN(BETWEEN TERMINALS)</p> <p>产品不能变形与破裂</p> <p>插拔力: 3N 至 20N</p> <p>接触电阻: 最大 30m Ω</p> <p>绝缘电阻: 最小 100 M Ω</p> <p>绝缘耐压: 最小 100VAC (端子之间)</p> |
| 4.8 | <p>COLD&amp;HEAT SHOCK TEST</p> <p>冷热冲击测试</p> | <p>THE JACK SHALL BE SUBJECTED TO 5 CYCLES OF THE FOLLOWING CONDITIONS SHOWED IN THE FIGURE,AND THEN SHALL RETURNED AND ALLOWED TO REMAIN IN ROOM AMBIENT CONDITION FOR 30 MINUTES</p> <p>将插座以下列条件作 5 个循环， 然后放回室内环境 30 分钟</p> <p>TEMP (°C)</p>  | <p>THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART.</p> <p>INSERTION &amp; EXTRACTION FORCE:3 TO 25N</p> <p>CONTACT RESISTANCE:MAX.30M Ω</p> <p>INSULATION RESISTANCE: MIN.100 M Ω</p> <p>DIELECTRIC WITHSTANDING VOLTAGE: 500VAC/MIN(BETWEEN TERMINALS)</p> <p>产品不能变形与破裂</p> <p>插拔力: 3N 至 25N</p> <p>接触电阻: 最大 30m Ω</p> <p>绝缘电阻: 最小 100 M Ω</p> <p>绝缘耐压: 最小 500VAC (端子之间)</p> |