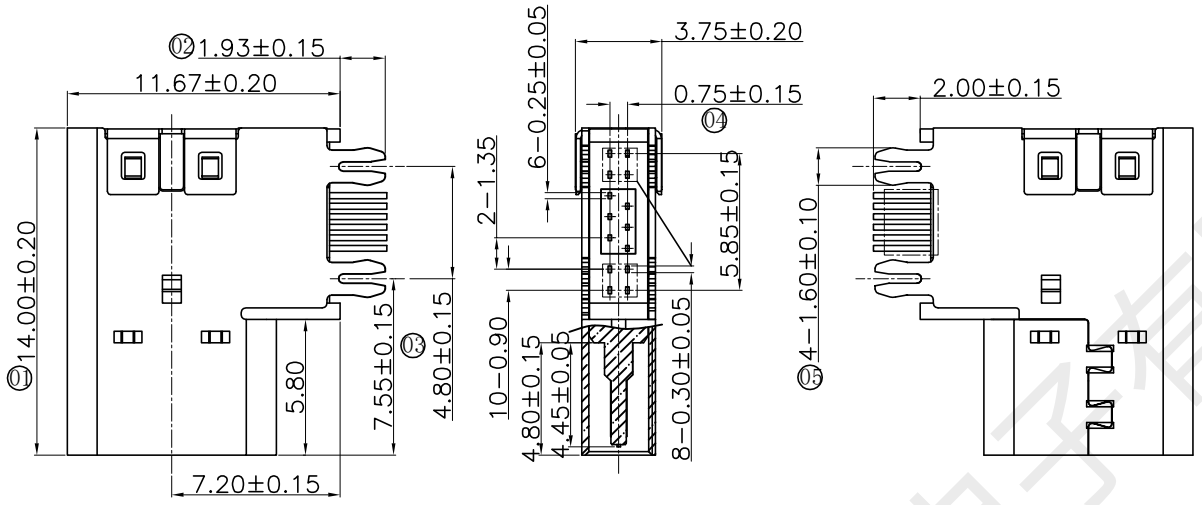
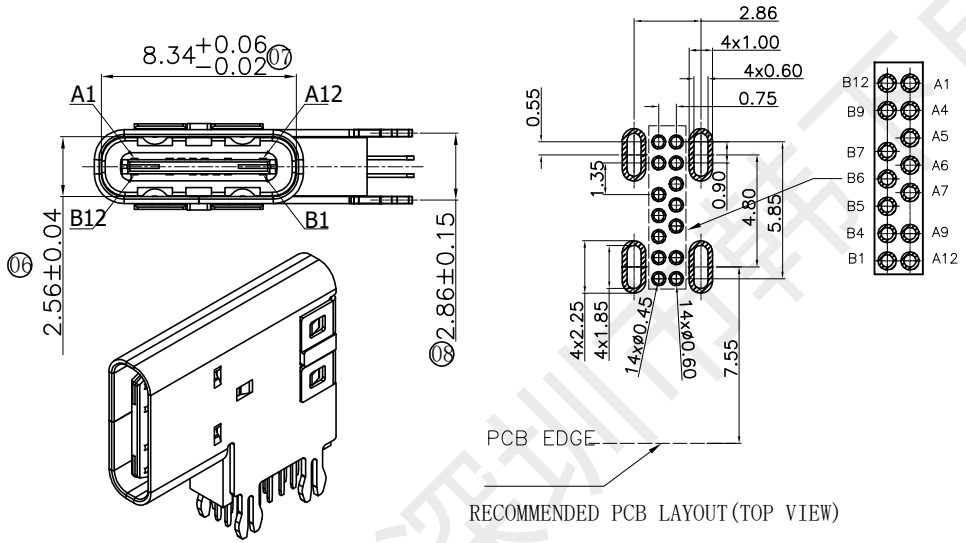
| REV | DESCRIPTION | DATE | APPROVED |
|---|---|---|---|
| AO | 初版发行 | 2017.10.15 | |

ROHS Compliant REACH




RECOMMENDED PCB LAYOUT(TOP VIEW)

| A1 | A2 | A3 | A4 | A5 | A6 | A7 | A8 | A9 | A10 | A11 | A12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GND | | | VBUS | CC1 | D+ | D− | | VBUS | | | GND |
| GND | | | VBUS | | D− | D+ | CC2 | VBUS | | | GND |
| B12 | B11 | B10 | B9 | B8 | B7 | B6 | B5 | B4 | B3 | B2 | B1 |

特性：

一、电气性能：EICTRICAL
1. 额定值：20V 3.0A MAX
2. 接触阻抗：40 MILLIOHMS MAX
3. 耐电压：150V AC / 1 mA MAX
4. 绝缘阻抗：150V DC/100 MEGA OHMS MIN

二、机械性能：
1. 插入力：5-20N
2. 拔出力：8-20N
3. 使用寿命：10000次

三、材料：MATERIAL
1、外壳：SUS304 1/2H T=0.30mm
2、后盖：SUS304 1/2H T=0.25mm
3、中夹片：SUS301 3/4H T=0.15mm
4、PIN针：黄铜 EH T=0.15mm
5、塑胶：LCP+30%G.F黑色

四、电镀:FINISH
1. 端子：接触点镀金1u"±20%
PIN脚焊接区域镀金G/F.
2. 外壳：镀镍50U"Min（盐雾24H）

五、电镀品需做粘锡测试：粘锡面积达到95%以上。

六、SMT回流焊（峰值260° C±5° C）不能起泡、熔胶、变色不良（变形在公差范围以内）

七、工作温度：-40° C~+85° C

八、盐雾测试：
通过24H在浓度为5±1%盐水的盐雾测试无生锈现象；

CUSTOMER DRAWING

| UNITS | SCALE | SHEET |
|---|---|---|
| mm | 1:1 | 1 OF 1 |

PROJECTION:

GENERAL TOLERANCE
0. ±0.25
0.0 ±0.20
0.00 ±0.15
0.° ±4°
0.0° ±3°

DRAW: 黄彬

CHECK: 张伟

APPD: 罗小春

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TITLE: HX TYPE-C 14P-C+2.6 DIP

| MAT'L | FINISH |
|---|---|
| SEE TABLE | SEE TABLE |

| DWG. NO. | PART NO. | SIZE |
|---|---|---|
| | | A4 |

深圳市韩下电子有限公司
Shenzhen Hanxia Electronic Co., Ltd
Tel: 0755-23086569

# 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：HX TYPE-C 14P-C+2.6 DIP

**贵公司承认印 Approval signatures**

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

日期 Date:

| | | |
|---|---|---|
| 拟制/Drawn | 黄彬 | 深圳市韩下电子有限公司 工程专用章 |
| 审核/Check | 张伟 | |
| 批准/Approved | 罗小春 | |

深圳市韩下电子有限公司

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| | |
|---|---|
| RATING（额定值） | 2 0 V 3 A |
| PRACTICAL TEMPERATURE RANGE<br>使用温度范围 | -40℃-85℃<br>在-40℃~+85℃温度内使用 |
| STANDARD ATMOSPHEIC CONDITIONS<br>测试标准状度 | 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 |

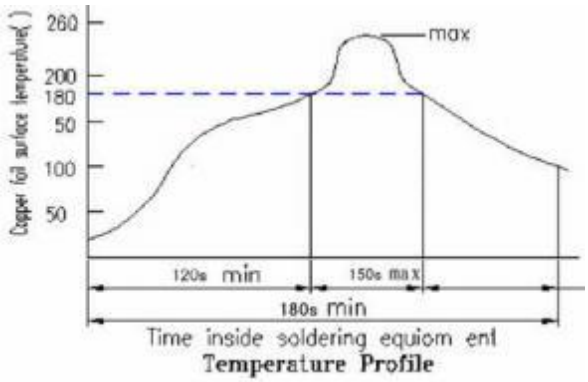
MECHANICAL（机械性能）

| 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 |
| | DISCONNECTION 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）

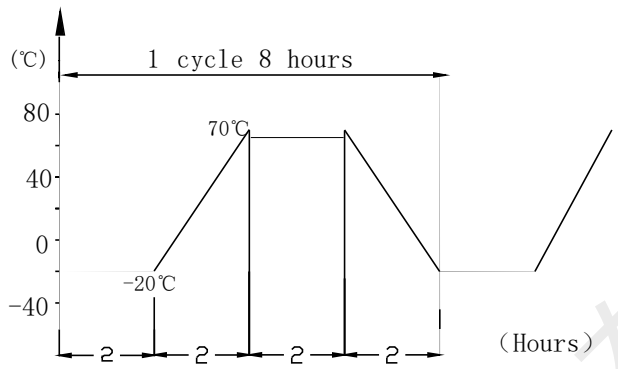
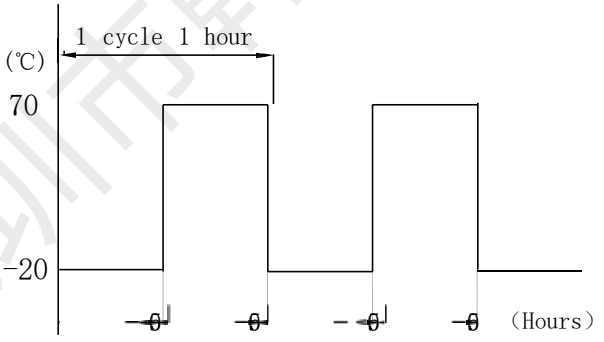
| ITEM 项目 | | TEST CONDITIONS 测试条件 | PERFORMANCE 规格 |
|---|---|---|---|
| 3.1 | CONTACT RESISTANCE<br>接触电阻 | MEASURED AT SMALL CURRENT （100mA OR LESS）<br>1000Hz<br>在微小电流（100 m A）以下测试 | 40mΩ MAX |
| 3.2 | INSULATION RESISTANCE<br>绝缘电阻 | APPLY A VOLTAGE OF 100V DC FOR 1 MIN<br>TO FOLLOWING PORTIONS AFTER WHICH MEASUREMENT<br>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 |

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| | | | |
|---|---|---|---|
| 3.3 | DIELECTRIC STRENGTH<br>耐电压 | AC 150V ims(50~60Hz)FOR 1 MIN TRIP CURRENT:0.5mA<br>(1) BETWEEN BODY AND CONDUCTOR<br>(2) BETWEEN CONDUCTORS NOT TO BE CONTACL<br>(3) BETWEEN CONDUCTORS NOT TO BE WHEN PLUG IS INSERTED DC 100V 1 MIN<br>输入 AC 150V （50Hz）/min 电压 1 分钟感度电流为 0.5mA ,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 | WITHOUT DAMAGE TO PARTS ARCING OR BREAKDOWN ETC<br>没有绝缘破坏等异常 |
| URABILITY（耐久性） | | | |
| ITEM 项目 | | TEST CONDITIONS 测试条件 | PERFORMANCE 规格 |
| 4．1 | SOLDERA-BILITY TEST<br>可焊性试验 | THE TOP OF THE TERMINALS SHALL BE DIPPED 1mm IN THE SOLDER BATH OF 250±5℃ FOR 5±0.5 SECONDS<br>端子顶部被浸入锡池中 1mm 深,温度为 250±5℃,时间为 5±0.5 秒 | （1）SOLDER WETTING TIME SHALL BE 3 SEC OR LESS<br>焊接时间应少于 3 秒<br>（2）THE AREA OF SOLDERING SHOULD BE OVER 75%<br>焊接面积应有 75%以上 |
| 4.2 | RESISTANCE TO SOLDERING HEAT TEST<br>耐焊性试验 | REFLOW SOLDERING CONDITIONS:<br>PREHEAT:TEMPERATURE ON THE COPPER FOIL SURFACE SHOULD REACH 180℃.120S AFTER THE P.C.B ENTERED INTO THE SOLDERING EQUIPMENT.<br>TALLEST TEMPERATURE:TEMPERATURE ON THE COPPER FOIL SURFACE SHOULD REACH THE PEAK TEMPERATURE OF 260±5℃WITH IN 20 SECONDS.<br>过回流焊条件：<br>预热: 电镀层表面的温度应达到 180℃,120s 后电路板进入回流焊设备。<br>最高温度: 电镀层表面温度最高为 260±5℃且停留不超过 20 秒。<br><br><br>Temperature Profile | WITHOUT DEFOR MATION OF CASE OR EXCESSIVE LOOSENESS OF TEMINALS ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED<br>本体无变形，满足于机械、电气性能 |

| | | | |
|---|---|---|---|
| 4．2 | RESISTANCE TO SOLDERING HEAT TEST<br>耐焊性试验 | SOLDERING IRON METHOD:<br>BIT TEMPERATURE 330±5℃ APPLICATION TIME OF SOLDERING IRON3±0.5 SEC<br>HOWEVER EXCESSIVE PRESSURE SHALL NOT BE APPLIED TO THE TERMINAL<br>手焊接的时候温度需控制在 330±5℃ ，时间为 3±0.5 秒，但不能在排脚上施加异常压力。 | WITHOUT DEFORMATION OF CASE OR EXCESSIVE LOOSENESS OF TEMINALS ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED<br>本体无变形，满足于机械、电气性能 |
| 4．3 | HUMIDITY TEST<br>潮湿试验 | THE JACK SHALL BE STORED ATA TEMPERATURE OF 40±2℃ AND A HUMIDITY OF 90%TO 96% FOR 96 Hr,THEN THE JACK SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITION FOR 1 Hr FOR OTHER PROCEDURES<br>放置 40±2℃ 的相应湿度为 90~96% Hr 环境中 96 小时后，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 APPEARANCE。<br>MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE 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 OF70±2℃ FOR 96 HOURS，AND THEN IT SHALL BE SUBJECTED TO THE CONTROLLED RECOVERY MBASURBM<br>放置在温度 70±2℃中测试 96 小时后， 再放置正常室温中 1 小时来测定 | |
| 4．5 | COLD TEST<br>耐寒试验 | THE JACK SHALL BE STORED ATA TEMPERATURE OF-25±3℃ FOR 96 HOURS AND THEN IT SHALL BE SUBJECTED TO THE CONTROLLED RECOVERY CONDITIONS FOR 1 HOUR AFTER WHICH<br>放置在温度-25±3℃中 96 小时后，再放置常温常湿中 1 小时来测定 | THERE SHALL BE NO DAMAGE ON APPEARANCE<br>MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE 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 BE MADE WITH THE MATING PLUGS AND JACKS FOR 10000 CYCLES AT A SPEED 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 BE MADE 10000 CYCLES AT A SPEED 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次的速度进行 10000次插入、拔出 | （1） CONTACT RESISTANCE SHALL BE ≤ 0.1Ω<br>（2） DISCONNECTION FORCE SHALL BE 0.6 TO 2.0Kgf<br>（3） MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED<br>(1) 接触电阻≤0.1Ω<br>(2) 拔出力是 0.6~2.0Kgf<br>(3) 其它:满足于机械,、电气性能 |

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| | | | |
|---|---|---|---|
| 4.7 | TEMPARATURE CYCLINGTEST<br>温度循环测试 | 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<br>将插座以下列条件作 5 个循环， 然后放回室内环境 30 分钟<br>Temp(℃)<br><br> | THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART.<br>INSERTION & EXTRACTION FORCE:3 TO 20N<br>CONTACT RESISTANCE:MAX.30M Ω<br>INSULATION RESISTANCE: MIN.100 M Ω<br>DIELECTRIC WITHSTANDING VOLTAGE: 100VAC/MIN(BETWEEN TERMINALS)<br><br>产品不能变形与破裂<br>插拔力： 3N 至 20N<br>接触电阻：最大 30m Ω<br>绝缘电阻：最小 100 M Ω<br>绝缘耐压：最小 100VAC（端子之间） |
| 4.8 | COLD&HEAT SHOCK TEST<br>冷热冲击测试 | THE JACK SHALL BE SUBJECTED TO5 CYCLES OF THE FOLLOWING CONDITIONS SHOWED IN THE FIGURE,AND THEN SHALL RETURNED AND ALLOWED<br>TO REMAIN IN ROOM AMBIENT CONDITION FOR 30MINUTES将插座以下列条件作5个循环，然后放回室内环境30分钟TEMP(℃)<br><br> | THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART.<br>INSERTION & EXTRACTION FORCE:3 TO 25N<br>CONTACT RESISTANCE:MAX.30M Ω<br>INSULATION RESISTANCE: MIN.100 M Ω<br>DIELECTRIC WITHSTANDING VOLTAGE: 500VAC/MIN(BETWEEN TERMINALS)<br><br>产品不能变形与破裂<br>插拔力： 3N 至 25N<br>接触电阻：最大 30m Ω<br>绝缘电阻：最小 100 M Ω<br>绝缘耐压：最小 500VAC（端子之间） |

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