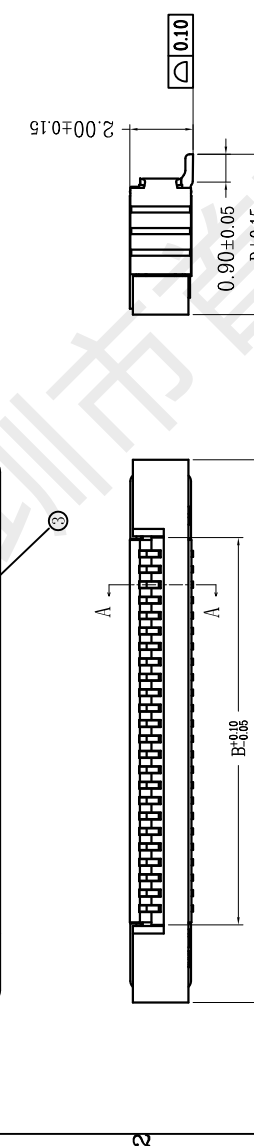
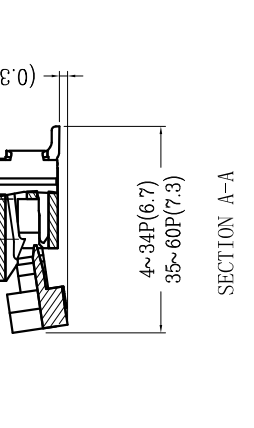
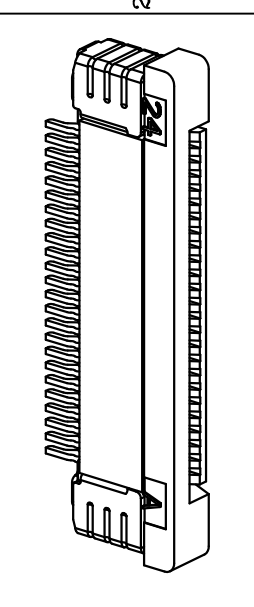
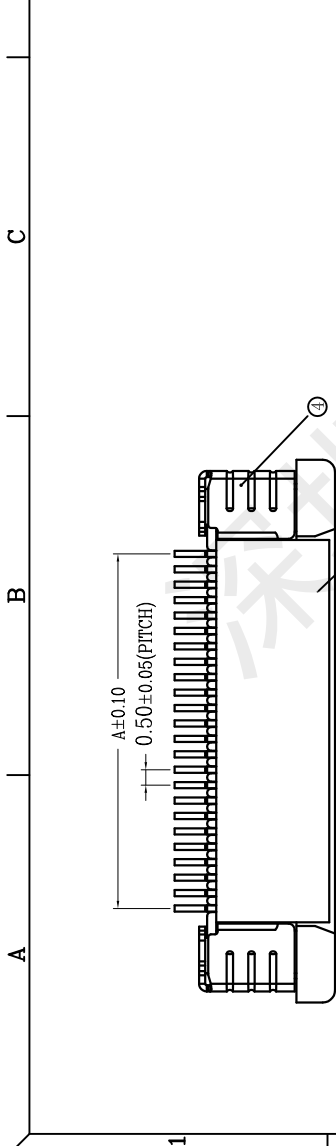
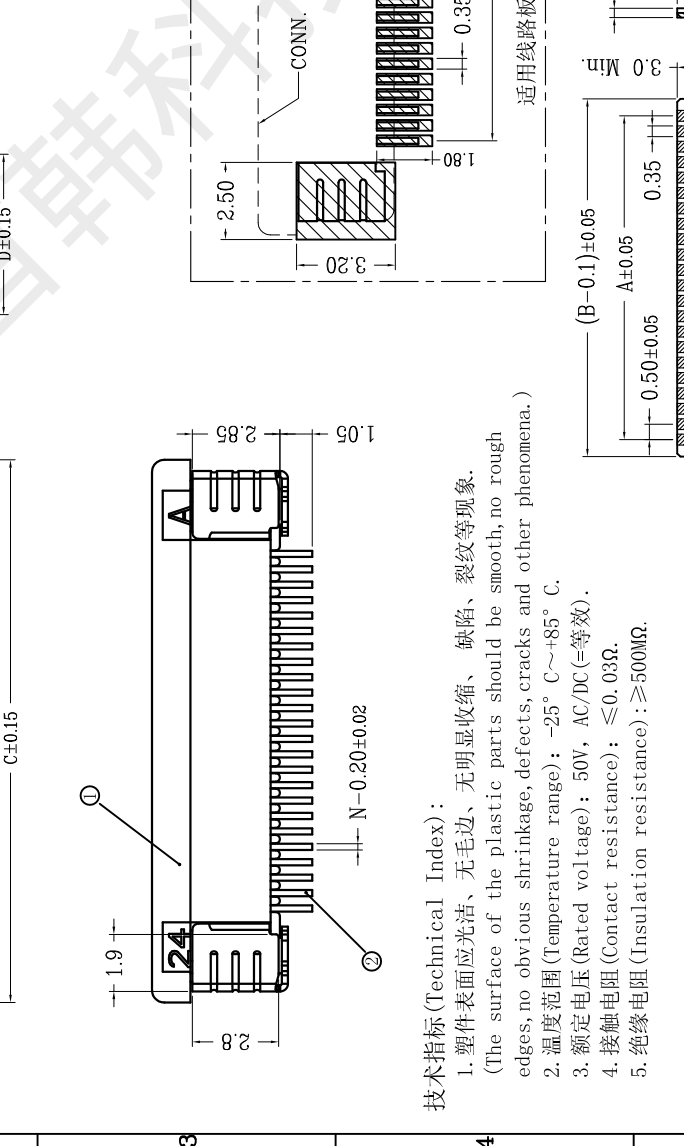
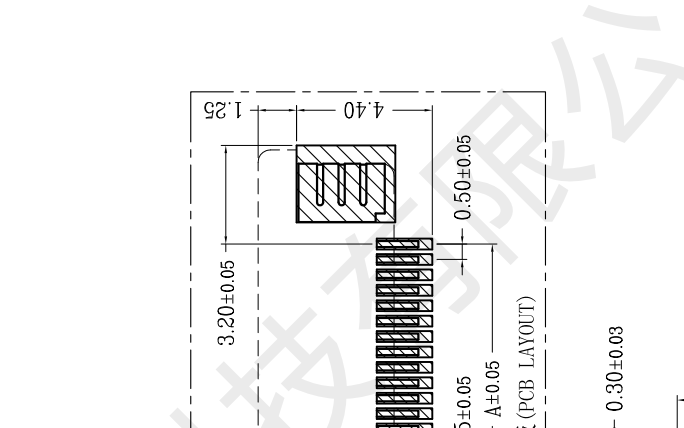


|  |  |            |  |   |
|--|--|------------|--|---|
| 变更摘要 (Change The Content)                |  | 日期 (Date)  | 品名 (Name)  | 材质 (Material)                               |
| 增加料号说明 (Add Material Number Description) |  | 2020/11/23 | 0.5 拉拔3代胶芯 (H2.0)<br>0.5 Pitch ZIF Type 3<br>Housing (H=2.0)       | LCP UL94V-0 本色<br><b>Natural</b>            |
|  |  |            | 0.5 拉拔上接端子 (H2.0)<br>0.5 Pitch H2.0 ZIF R/A<br>Type Upper terminal | 磷青铜/表面镀锡<br>Phosphor Bronze/<br>Tin Plating |
|  |  |            | 0.5 拉拔3代后盖 (H2.0)<br>0.5 Pitch ZIF Type 3<br>Actuator (H=2.0)      | LCP UL94V-0 黑色<br><b>Black</b>              |
|  |  |            | 0.5 拉拔3代弹片 (H2.0)<br>0.5 Pitch ZIF Type 3<br>Fitting Nail (H=2.0)  | 黄铜/表面镀锡<br>Brass/Tin Plating                |

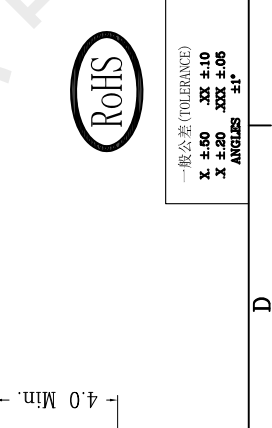
|          |   |
|----------|---|
| 版次 (Ed.) | 0 |
| 序号 (No.) | ① |
| 序号 (No.) | ② |
| 序号 (No.) | ③ |
| 序号 (No.) | ④ |



| CKT | A     | B     | C    | D | A  | B     | C     | D    |
|-----|-------|-------|------|---|----|-------|-------|------|
| 4   | 1.50  | 2.56  | 7.6  |   | 33 | 16.00 | 17.06 | 22.1 |
| 5   | 2.00  | 3.06  | 8.1  |   | 34 | 16.50 | 17.56 | 22.6 |
| 6   | 2.50  | 3.56  | 8.6  |   | 35 | 17.00 | 18.06 | 23.1 |
| 7   | 3.00  | 4.06  | 9.1  |   | 36 | 17.50 | 18.56 | 23.6 |
| 8   | 3.50  | 4.56  | 9.6  |   | 37 | 18.00 | 19.06 | 24.1 |
| 9   | 4.00  | 5.06  | 10.1 |   | 38 | 18.50 | 19.56 | 24.6 |
| 10  | 4.50  | 5.56  | 10.6 |   | 39 | 19.00 | 20.06 | 25.1 |
| 11  | 5.00  | 6.06  | 11.1 |   | 40 | 19.50 | 20.56 | 25.6 |
| 12  | 5.50  | 6.56  | 11.6 |   | 41 | 20.00 | 21.06 | 26.1 |
| 13  | 6.00  | 7.06  | 12.1 |   | 42 | 20.50 | 21.56 | 26.6 |
| 14  | 6.50  | 7.56  | 12.6 |   | 43 | 21.00 | 22.06 | 27.1 |
| 15  | 7.00  | 8.06  | 13.1 |   | 44 | 21.50 | 22.56 | 27.6 |
| 16  | 7.50  | 8.56  | 13.6 |   | 45 | 22.00 | 23.06 | 28.1 |
| 17  | 8.00  | 9.06  | 14.1 |   | 46 | 22.50 | 23.56 | 28.6 |
| 18  | 8.50  | 9.56  | 14.6 |   | 47 | 23.00 | 24.06 | 29.1 |
| 19  | 9.00  | 10.06 | 15.1 |   | 48 | 23.50 | 24.56 | 29.6 |
| 20  | 9.50  | 10.56 | 15.6 |   | 49 | 24.00 | 25.06 | 30.1 |
| 21  | 10.00 | 11.06 | 16.1 |   | 50 | 24.50 | 25.56 | 30.6 |
| 22  | 10.50 | 11.56 | 16.6 |   | 51 | 25.00 | 26.06 | 31.1 |
| 23  | 11.00 | 12.06 | 17.1 |   | 52 | 25.50 | 26.56 | 31.6 |
| 24  | 11.50 | 12.56 | 17.6 |   | 53 | 26.00 | 27.06 | 32.1 |
| 25  | 12.00 | 13.06 | 18.1 |   | 54 | 26.50 | 27.56 | 32.6 |
| 26  | 12.50 | 13.56 | 18.6 |   | 55 | 27.00 | 28.06 | 33.1 |
| 27  | 13.00 | 14.06 | 19.1 |   | 56 | 27.50 | 28.56 | 33.6 |
| 28  | 13.50 | 14.56 | 19.6 |   | 57 | 28.00 | 29.06 | 34.1 |
| 29  | 14.00 | 15.06 | 20.1 |   | 58 | 28.50 | 29.56 | 34.6 |
| 30  | 14.50 | 15.56 | 20.6 |   | 59 | 29.00 | 30.06 | 35.1 |
| 31  | 15.00 | 16.06 | 21.1 |   | 60 | 29.50 | 30.56 | 35.6 |
| 32  | 15.50 | 16.56 | 21.6 |   |    |       |       |      |



|            |                      |
|------------|----------------------|
| 品名 (TITLE) | 0.5-7P CTSJ-H2.0 119 |
| 制图 (DR)    | 李春风                  |
| 校对 (CHKD)  | 钟华华                  |
| 审核 (APPD)  | 罗孝金                  |
| 张数 (SHEET) | 1 Of 1               |
| 尺寸 (SIZE)  | A4                   |
| 版本 (REV)   | A                    |



RoHS

一般公差 (TOLERANCE)

X ±0.05 XX ±0.10

X ±0.20 XXX ±0.05

ANGLES ±1°

深圳市首韩科技有限公司

料号 (Dwg.No)

比例 (SCALE) 1:1

单位 (UNITS) mm

适用扁平线 (Applicable Flat Cable)

技术指标 (Technical Index):

1. 塑件表面应光洁、无毛边、无明显收缩、缺陷、裂纹等现象。  
(The surface of the plastic parts should be smooth, no rough edges, no obvious shrinkage, defects, cracks and other phenomena.)

2. 温度范围 (Temperature range): -25° C~+85° C.

3. 额定电压 (Rated voltage): 50V, AC/DC (=等效).

4. 接触电阻 (Contact resistance): ≤0.03Ω.

5. 绝缘电阻 (Insulation resistance): ≥500MΩ.



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

客 户 Customer:

\_\_\_\_\_

产品名称 Project:

FPC

规格型号 Part No:

0.5-7P CTSJ-H2.0 119

### 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 |  |

## 产 品 规 格 书

### PRODUCT SPECIFICATION

#### 【1】适用范围 SCOPE

本规格书适用于：0.5间距柔性扁平电缆连接器

This specification covers the 0 . 5 mm Pitch FPC/FFC Connectors

#### 【2】产品名称及型号 PRODUCT NAME AND PART NUMBER

| 产品名称 Product Name | 产品型号 Part Number |
|-------------------|------------------|
| FFC/FPC 扁平电缆连接器   |                  |
|                   |                  |

#### 【3】定格 RATINGS

| 项目 Item                             | 规 格  | Requirement                       |
|-------------------------------------|------|-----------------------------------|
| 最大容许电压<br>Rated Voltage(MAX)        | 50V  | [AC/DC(有效值<br>Virtual value)50Hz] |
| 最大容许电流<br>Rated Current(MAX)        | 0.5A |                                   |
| 使用温度范围<br>Ambient temperature Range |      | -25℃ ~ +85℃                       |

#### 【4】性能 PERFORMANCE

##### 4.1 电气性能 Electrical Performance

| 项目 Item |                               | 条件 Test Condition   | 规格 Requirement        |
|---------|-------------------------------|---|-----------------------|
| 4.1.1   | 接触电阻<br>Contact Resistance    | 适合 FPC/FFC 嵌合；开放电压 20mV 以下；短路电流 10mA 的状态下测定。<br>Mate applicable FPC/FFC and measure by dry circuit, 20mV MAX, 10mA.   | 30 mΩ MAX             |
| 4.1.2   | 绝缘电阻<br>Insulation Resistance | 适合 FPC/FFC 嵌合；相邻端子间或端子与地面间加 DC 500V 下测定。<br>Mate applicable FPC/FFC and apply 500V DC between adjacent terminal or ground.  | 500MΩ MIN             |
| 4.1.3   | 耐电压<br>Dielectric             | 适合 FPC/FFC 嵌合；相邻端子间或端子与地面间加 AC 250V（有效值）历时 1 分钟下测定。<br>Mate applicable FPC/FFC and apply 250V AC (virtual value) for 1minute between adjacent terminal or ground. | 无击穿现象<br>No Breakdown |

## 4.2 机械性能 Mechanical Performance

| 项目 Item |  | 条件 Test Condition   | 规格 Requirement  |
|---------|--|---|---|
| 4.2.1   | 锁紧力及拔出力<br>Locking and Withdrawal Force    | 适合 0.3mm 厚的 FFC；用每分钟 25±3mm 的速度；平行地插入、锁紧、拔出。<br>Insert and extract applicable FFC at the speed rate of 25±3mm/minute. | 锁紧力 Locking<br>1.96*n (N) MAX<br>拔出力 Withdrawal<br>0.49*n (N) MIN |
| 4.2.2   | 端子保持力<br>Terminal /Housing Retention Force | 以用每分钟 25±3mm 的速度平行向外拉<br>Pull the terminal at the speed rate of 25 ± 3mm per minute                                   | 0.25N MIN   |

## 4.3 环境和其他性能 Environmental Performance and Others

| 项目 Item |   | 条件 Test Condition  | 规格 Requirement             |           |
|---------|---|--|----------------------------|-----------|
| 4.3.1   | 重复插拔<br>Repeated Insertion and Withdrawal | 无通电状态；以 10 次/分钟的速度插拔 20 次<br>Insertion and withdrawal actuator up to 20 cycles at the speed rate of less than 10 cycles/minute | 接触抵抗<br>Contact Resistance | 60 mΩ MAX |
| 4.3.2   | 温度上升<br>Temperature Rise                  | 适合 FPC/FFC 嵌合；最大容许电流通电，温度测定。（UL 498）<br>Carrying rated current load. (UL 498)  | 温度上升<br>Temperature Rise   | 30 °C MAX |

| 项目 Item |      | 条件 Test Condition                        | 规格 Requirement   |                  |
|---------|------|--|------------------|------------------|
| 4.3.3   | 耐振动性 | DC 1mA 通电状态下；嵌合轴沿 XYZ 三个方向振动；振幅 1.5mm；频率 | 外观<br>Appearance | 无损坏<br>No Damage |

|         |                             |  |                               |                                     |
|---------|-----------------------------|--|-------------------------------|-------------------------------------|
|         | Vibration                   | 10-55-10Hz/分; 历时 2 小时<br>Amplitude: 1.5mm P-P<br>Sweep time: 10-55-10Hz in 1 minute<br>Duration: 2 hours in each X.Y.Z. axes                   | 接触抵抗<br>Contact Resistance    | 60 m Ω<br>MAX                       |
|         |                             |  | 瞬断<br>Discontinuity           | 1 ms MAX.                           |
| 4.3.4   | 耐冲击性<br>Shock               | DC 1mA 通电状态下; 嵌合轴沿相互垂直的 6 个方向; 以 490m/s <sup>2</sup> {50G}冲击; 各 3 次<br>490m/s <sup>2</sup> {50G}, 3 strokes in each X.Y.Z. axes.               | 外观<br>Appearance              | 无损坏<br>No Damage                    |
|         |                             |  | 瞬断<br>Discontinuity           | 1 ms MAX.                           |
| 4.3.5   | 耐热性<br>Heat Resistance      | 适合 FPC/FFC 嵌合; 85±2℃的空气中; 放置 96 小时; 再回到室温中放置 1-2 小时<br>85±2℃, 96 hour  | 外观<br>Appearance              | 无损坏<br>No Damage                    |
|         |                             |  | 接触抵抗<br>Contact Resistance    | 60 m Ω<br>MAX                       |
| 4.3.6   | 耐寒性<br>Cold Resistance      | 适合 FPC/FFC 嵌合; -40±2℃的空气中; 放置 96 小时; 再回到室温中放置 1-2 小时<br>-40±2℃, 96 hour  | 外观<br>Appearance              | 无损坏<br>No Damage                    |
|         |                             |  | 接触抵抗<br>Contact Resistance    | 60 m Ω<br>MAX                       |
| 4.3.7   | 耐湿性<br>Humidity             | 适合 FPC/FFC 嵌合; 40±2℃、相对湿度 90-95%的空气中; 放置 96 小时; 再回到室温中 0.5 小时内测定<br><br>Temperature: 40±2℃<br>Relative Humidity: 90-95%<br>Duration: 96 Hours  | 外观<br>Appearance              | 无损坏<br>No Damage                    |
|         |                             |  | 接触抵抗<br>Contact Resistance    | 60 m Ω<br>MAX                       |
|         |                             |  | 耐电压<br>Dielectric Strength    | 必须满足<br>4.1.3<br>Must meet<br>4.1.3 |
|         |                             |  | 绝缘抵抗<br>Insulation Resistance | 20 M Ω<br>MIN                       |
| 4.3.8   | 温度循环<br>Temperature Cycling | 适合 FPC/FFC 嵌合; -55±3℃ 30 分钟; 常温常湿 10-15 分钟; 85±2℃ 30 分钟; 常温常湿 10-15 分钟, 循环 5 次。<br>5 cycles of:<br>a) -55±3℃ 30 minutes<br>b) 85±2℃ 30 minutes | 外观<br>Appearance              | 无损坏<br>No Damage                    |
|         |                             |  | 接触抵抗<br>Contact Resistance    | 60 m Ω<br>MAX                       |
| 项目 Item |                             | 条件 Test Condition  | 规格 Requirement                |                                     |
| 4.3.9   | 耐盐雾性<br>Salt Spray          | 适合 FPC/FFC 嵌合; 35±2℃、5±1% 的盐水喷雾 24 小时; 试验后常温水洗; 再室温干燥。<br>24±4 hours exposure to a salt spray from the 5±1% solution at 35±2℃.                 | 外观<br>Appearance              | 无损坏、腐蚀<br>No Damage                 |
|         |                             |  | 接触抵抗<br>Contact Resistance    | 60 m Ω<br>MAX                       |

|        |                                      |   |                            |                     |
|--------|--------------------------------------|---|----------------------------|---------------------|
| 4.3.10 | 耐亚硫酸<br>SO2 Gas                      | 适合 FPC/FFC 嵌合; 40±2℃、50±5ppm 的亚硫酸中放置 24 小时<br>24 hours exposure to 50 ± 5ppm. SO2 gas at 40±2℃.   | 接触抵抗<br>Contact Resistance | 60 m Ω<br>MAX       |
| 4.3.11 | 耐氨性<br>NH3 Gas                       | 适合 FPC/FFC 嵌合; 浓度为 28% 的氨水容器中; 放置 40 分钟。<br>40 minutes exposure to NH3 gas evaporating from 28% Ammonia solution                        | 外观<br>Appearance           | 无损坏<br>No Damage    |
|        |                                      |   | 接触抵抗<br>Contact Resistance | 60 m Ω<br>MAX       |
| 4.3.12 | 可焊性<br>Solder ability                | 端子前端基准面 0.2mm 处浸入 245±5℃ 的锡槽中; 历时 2±0.5 sec。<br>Soldering Time: 2±0.5 sec.<br>Soldering Temperature: 245±5℃<br>0.2 mm from terminal tip | 沾敷性<br>Solder Wetting      | 沾敷面积<br>95%以上       |
| 4.3.13 | 耐焊接热<br>Resistance to Soldering heat | 在 245±5℃ 热风炉中经 30±5sec 条件下, 至少进行 5 次。<br>Soldering Time: 30±5 sec.<br>Soldering Temperature: 245±5℃                                     | 外观<br>Appearance           | 无损坏、变形<br>No Damage |

( ) : 参考规格 Reference Standard

{ } : 参考单位 Reference Unit

## 【5】外观形状、寸法及材质 PRODUCT SHAPE, DIMENSIONS AND MATERIALS

图面参照 Refer to the drawing.

| 名称 NAME         | 材质 MATERIALS        |
|-----------------|---------------------|
| 主体 Main body    | LCP UL 94V-0        |
| 锁扣 Housing Lock | LCP UL 94V-0        |
| 端子 Sit uip      | 磷青铜 Phosphor Bronze |
| 焊片 Contact      | 磷青铜 Phosphor Bronze |
| 备注 Remark       | 金属表面镀锡              |