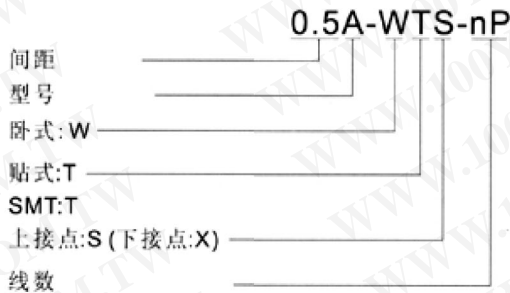
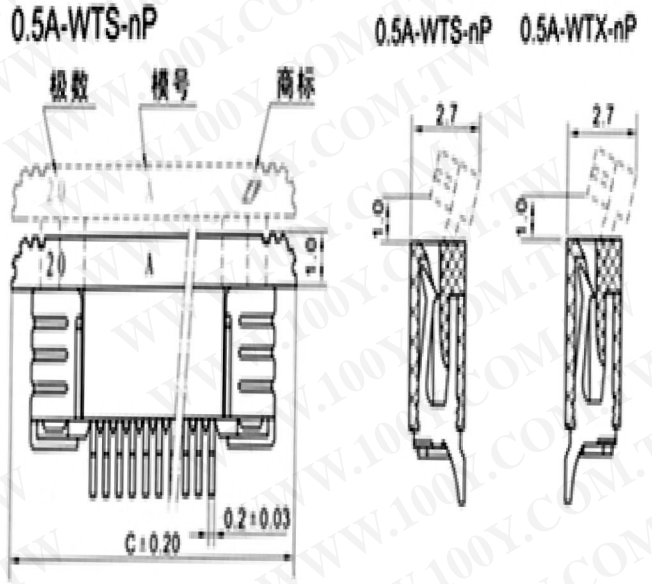
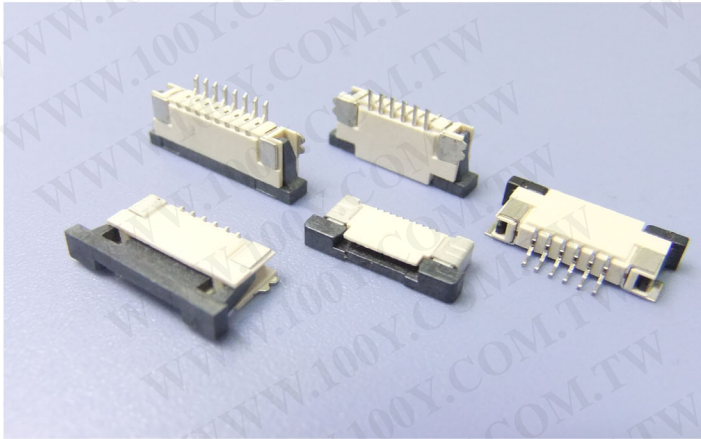


0.5A-WTS-nP



胜特力材料 886-3-5753170
 胜特力电子(上海) 86-21-34970699
 胜特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

接触件

* 材质: 磷青铜

塑胶本体

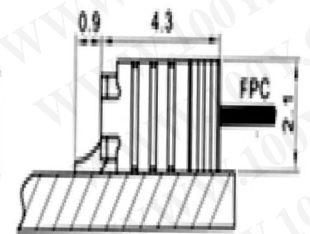
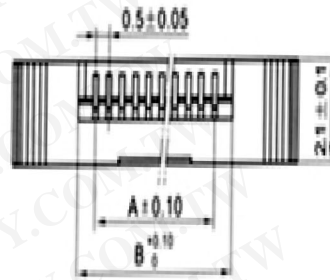
* 材质: 尼龙46, UL94V-0

包装方式

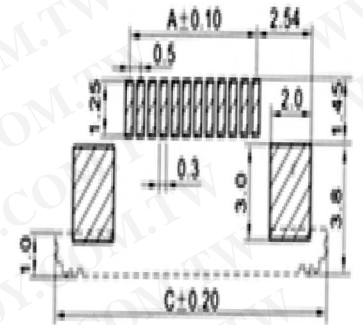
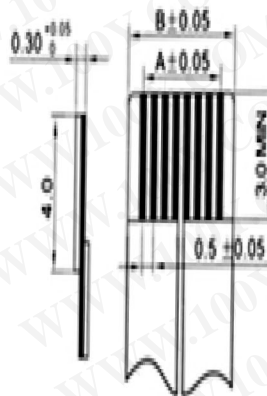
- * 编带包装
- * 管装
- * 袋装

技术参数

- * 极数: 4 ~ 40
- * 额定电压: AC、DC、200V (50HZ有效值)
- * 额定电流: > 0.5A 、 AC、 DC

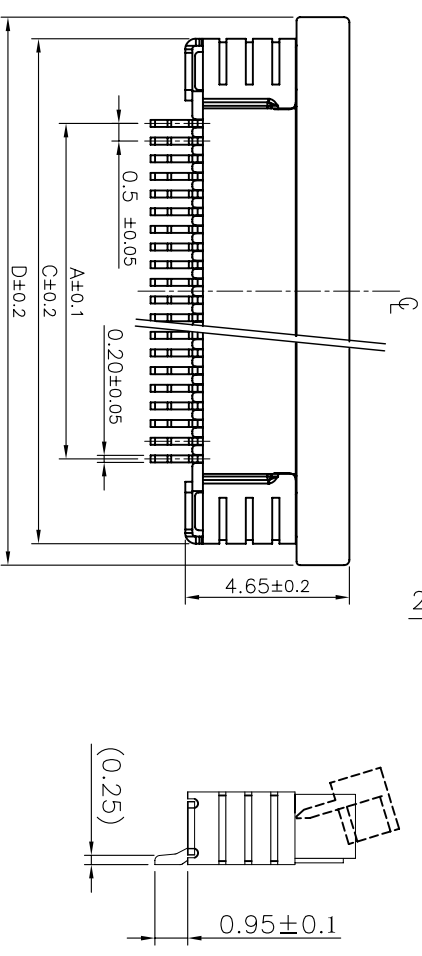
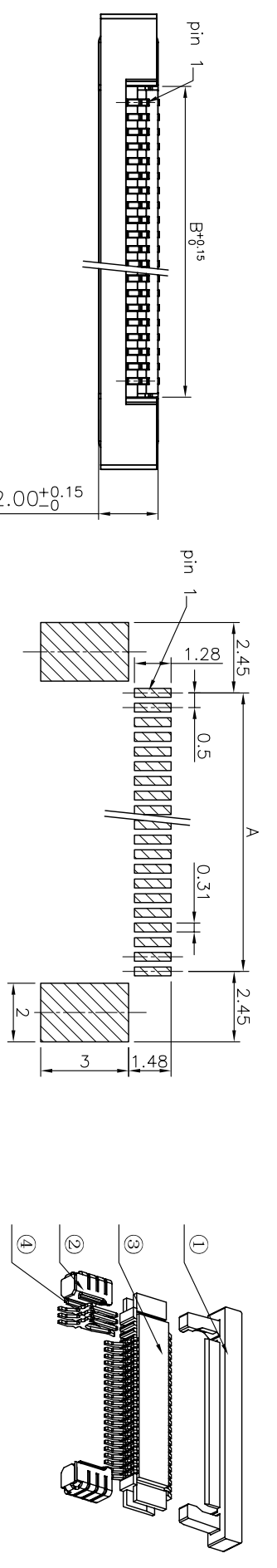


安装图
ASSEMBLY LAYOUT

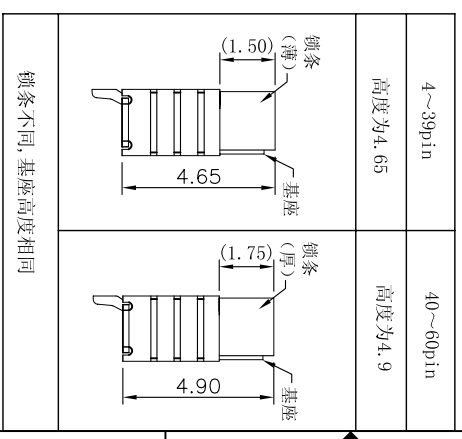


通用扁平电缆
Proper cable

印制线路板
PCB P.C.B Layout



| 孔位 | A | B | C | D | 孔位 | A | B | C | D | 孔位 | A | B | C | D |
|----|-------|-------|-------|-------|----|-------|-------|-------|-------|----|------|------|-------|-------|
| 34 | 16.50 | 17.60 | 21.70 | 22.80 | 19 | 9.00 | 10.10 | 14.20 | 15.30 | 4 | 1.50 | 2.60 | 6.70 | 7.80 |
| 35 | 17.00 | 18.10 | 22.20 | 23.30 | 20 | 9.50 | 10.60 | 14.70 | 15.80 | 5 | 2.00 | 3.10 | 7.20 | 8.30 |
| 36 | 17.50 | 18.60 | 22.70 | 23.80 | 21 | 10.00 | 11.10 | 15.20 | 16.30 | 6 | 2.50 | 3.60 | 7.70 | 8.80 |
| 37 | 18.00 | 19.10 | 23.20 | 24.30 | 22 | 10.50 | 11.60 | 15.70 | 16.80 | 7 | 3.00 | 4.10 | 8.20 | 9.30 |
| 38 | 18.50 | 19.60 | 23.70 | 24.80 | 23 | 11.00 | 12.10 | 16.20 | 17.30 | 8 | 3.50 | 4.60 | 8.70 | 9.80 |
| 39 | 19.00 | 20.10 | 24.20 | 25.30 | 24 | 11.50 | 12.60 | 16.70 | 17.80 | 9 | 4.00 | 5.10 | 9.20 | 10.30 |
| 40 | 19.50 | 20.60 | 24.70 | 25.80 | 25 | 12.00 | 13.10 | 17.20 | 18.30 | 10 | 4.50 | 5.60 | 9.70 | 10.80 |
| 41 | 20.00 | 21.10 | 25.20 | 26.30 | 26 | 12.50 | 13.60 | 17.70 | 18.80 | 11 | 5.00 | 6.10 | 10.20 | 11.30 |
| 42 | 20.50 | 21.60 | 25.70 | 26.80 | 27 | 13.00 | 14.10 | 18.20 | 19.30 | 12 | 5.50 | 6.60 | 10.70 | 11.80 |
| 43 | 21.00 | 22.10 | 26.20 | 27.30 | 28 | 13.50 | 14.60 | 18.70 | 19.80 | 13 | 6.00 | 7.10 | 11.20 | 12.30 |
| 44 | 21.50 | 22.60 | 26.70 | 27.80 | 29 | 14.00 | 15.10 | 19.20 | 20.30 | 14 | 6.50 | 7.60 | 11.70 | 12.80 |
| 45 | 22.00 | 23.10 | 27.20 | 28.30 | 30 | 14.50 | 15.60 | 19.70 | 20.80 | 15 | 7.00 | 8.10 | 12.20 | 13.30 |
| 46 | 22.50 | 23.60 | 27.70 | 28.80 | 31 | 15.00 | 16.10 | 20.20 | 21.30 | 16 | 7.50 | 8.60 | 12.70 | 13.80 |
| 47 | 23.00 | 24.10 | 28.20 | 29.30 | 32 | 15.50 | 16.60 | 20.70 | 21.80 | 17 | 8.00 | 9.10 | 13.20 | 14.30 |
| 48 | 23.50 | 24.60 | 28.70 | 29.80 | 33 | 16.00 | 17.10 | 21.20 | 22.30 | 18 | 8.50 | 9.60 | 13.70 | 14.80 |



| 序号 | 零件名称 | 数量 | 材质 | 备注 |
|----|------|----|--------|----------|
| ④ | 端子 | N | 磷铜 | 镀底, 镀锡 |
| ③ | 底座 | 1 | LCP 米色 | UL 94V-0 |
| ② | 焊片 | 2 | 磷铜 | 镀底, 镀锡 |
| ① | 锁扣 | 1 | PS 黑色 | UL 94V-0 |

INTENDED USED PART NAME: FFC/FPC 0.5S-1X-NPWB
 INTENDED USED PART NO.:
 DRAWING NO.:
 SCALE: NONE
 REV.:

CHECKED BY:
 APPROVED BY:

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:
 X. ±0.3
 XX ±0.2
 ANG. ±1°

UNIT: mm

NO. REV. A

NEW RELEASE REVISIONS

CHK. DATE

PRODUCT SPECIFICATION

1.0 适用范围 SCOPE

此规范含盖 (FFC/FPC 扁平电缆连接器) 的性能测试及质量要求。

This specification covers performance tests and quality requirements for FFC/FPC Connector.

2.0 实施文件 APPLICABLE DOCUMENTS

下列数据把此规格书和此中指定的规范的一部分结合起来, 如果发生在这种说明的要求和画的产品之间的冲突, 图面为此产品的优先参考数据。如果发生在此规范中的要求和被引用的数据之间冲突, 将依此规范为优先。

The following documents form a part of this specification to the extent specified herein, In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

3.0 测试要求 Test Requirements

3.1 设计与生产 Design and construction

产品设计, 生产和测试必须满足此产品适用的产品图面要求。

product shall be of the design, construction and physical dimensions specified on the applicable product drawing.

3.2 外观形状.尺寸及材质 Product Shape, Dimensions and Materials.

图面参照 Refer to the drawing.

- a. 基座 Housing: LCP(米色) UL94V-0
- b. 锁条 Housing: LCP(黑色) UL94V-0
- c. 接触件 Contact: 磷铜 镀锡 Phosphor Bronze tin-plated
- d. 焊片 Contact: 磷铜 镀锡 Phosphor Bronze tin-plated

3.3 额定值 Rating

- a. 额定电压 Rated voltage : AC, DC, 50V
- b. 额定电流 Rated current : 0.5A
- c. 正常工作温度 Ambient temperature : -25°C~+85°C

3.4 电气性能 Electrical Performance

| 项目 Items | 测试方法 Test Condition | 测试要求 Requirement |
|---------------------------------|---|--|
| A 接触电阻 Contact Resistance | FFC/FPC 嵌合, 加压 20mV 以下, 电流 10mA Mate applicable FPC/FFC and measure by dry circuit, 20mV max., 10mA | 接触电阻 ≤ 30mΩ Contact Resistance ≤ 30mΩ |

PRODUCT SPECIFICATION

| | | | |
|---|--|--|--|
| B | 绝缘电阻 Insulation Resistance | FFC/FPC 嵌合, 相邻端子或端子与地面加 DC 500V Mate applicable FPC/FFC and apply 500V DC Between adjacent terminal or ground | 绝缘电阻最小 500MΩ Insulation Resistance ≥ 500MΩ |
| C | 耐电压 Dielectric withstanding Voltage | 相邻端子或端子与地面加 AC 200V(有效值), 时间 60 秒 Mate applicable FPC/FFC and apply 200V AC (rms) for 1 minute between adjacent terminal or ground | 外观无任何损坏异状 泄露电流不超过 0.5mA No Breakdown Leakage current shall not exceed 0.5mA |

3.5 机械特性 Mechanical Performance

| 项目 Items | 测试方法 Test Condition | 测试要求 Requirement | |
|-------------|---------------------------|--|---|
| D | 拔出力 withdrawal force | FFC/FPC 线厚度 0.3mm, 用每分 25±3mm 的速度, 平行的插入、锁紧, 拔出。 insert and withdraw applicable FFC at the speed rate of 25±3mm/minute | 拔出力: 0.45n*N Min withdrawal force: 0.45N*n Min |
| E | 端子保持力 Terminal/housing | 以每分 25±3mm 的速度平行向外拉 Apply axial pull out force at the speed rate of 25 ± 3mm/minute on the terminal assembled in the housing. | 1.8n MIN |
| F | 耐久性 Durability | 无通电状态, 以 10 次/每分的速度插拔 20 次 Insertion and withdrawal actuator up to 20 cycles at the speed rate of less than 10cycles/minute | 接触电阻 60 mΩ MAX Contact Resistance 60mΩ MAX |

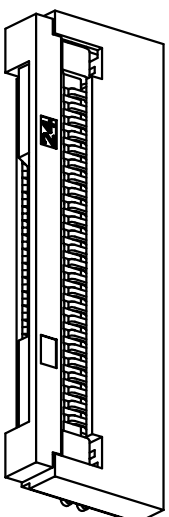
3.6 环境和其它性能 Environmental performance and others

| 项目 Items | 测试方法 Test Condition | 测试要求 Requirement | |
|-------------|--------------------------|--|---|
| G | 温度上升 Temperature Rise | FFC/FPC 嵌合, 最大容许电流通电, 温度测定, (UL498) Mate applicable FPC and measure the temperature rise of contact when the maximum AC rated current is passed. (UL498) | 温度上升幅度 30℃ MAX Temperature rise 30℃ MAX |
| H | 耐振动性 Vibration | DC 1mA 通电状态, 嵌合轴沿 XYZ 三个方向振动, 振幅: 1.52mm 频率: 10-55-10Hz/分, 时间: 2 小时 Amplitude: 1.52mm P-P Sweep time: 10-55-10Hz/minute Duration: 2 hours in each X.Y.Z. axes | 外观: 无损坏 接触电阻: 60mΩ MAX 瞬断: 1ms MAX Appearance: No damage Contact resistance: 60mΩ MAX Discontinuity: 1ms MAX |
| I | 耐冲击性 Mechanical Shock | DC 1mA 通电状态, 嵌合轴沿相互垂直的六个方向以 490m/S ² {50G} 冲击时间 11milliseconds, 重复 3 次 3times of shocks shall be applied for each 6 directions along 3 mutually perpendicular axes, passing DC 1 mA current during the test. Peak value: 490m/S ² {50G} Duration: 11 milliseconds | 外观: 无损坏 接触电阻: 60mΩ MAX 瞬断: 1ms MAX Appearance: No damage Contact resistance: 60mΩ MAX Discontinuity: 1ms MAX |

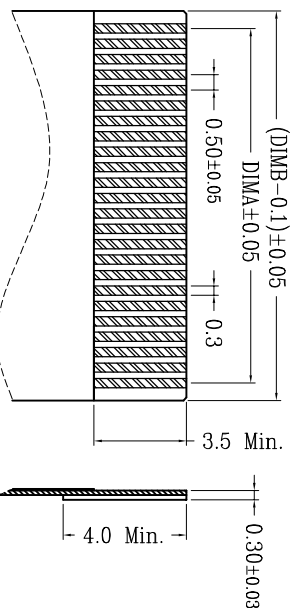
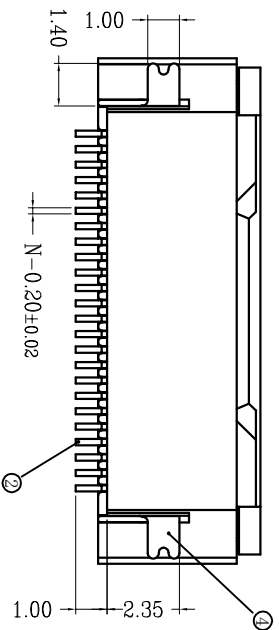
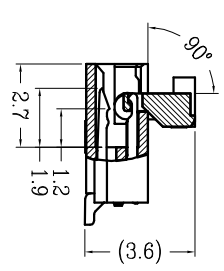
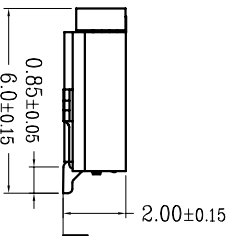
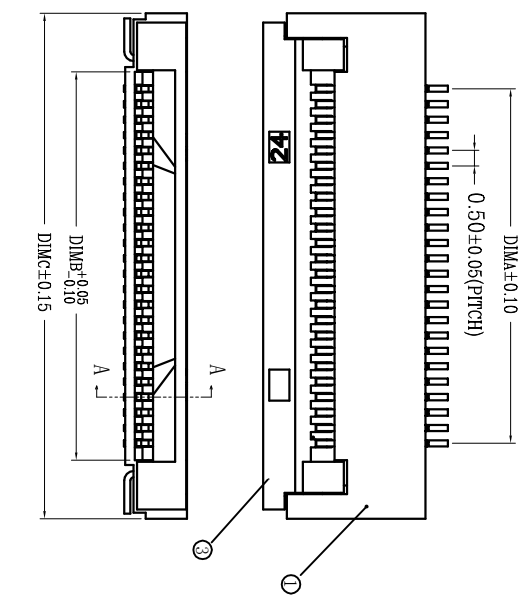
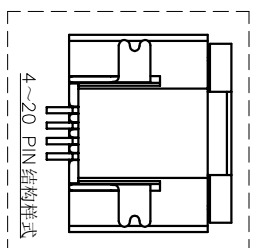
PRODUCT SPECIFICATION

| | | | |
|---|---|--|--|
| J | 耐热性 Heat Resistance | FFC/FPC 嵌合, 85°C ± 2°C 空气, 放置 96 小时, 再回正常室温放置 1-2 小时. Mate applicable FPC/FFC and expose to 85°C ± 2°C for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed. | 外观: 无损坏 接触电阻: 60 mΩ MAX Appearance no damage Contact resistance: 60mΩ MAX |
| K | 耐寒性 Cold Resistance | FFC/FPC 嵌合. -40°C ± 2°C, 放置 96 小时, 再回到正常室温放置 1-2 小时. Mate applicable FPC/FFC and expose to -40°C ± 2°C for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed. | 外观: 无损坏 接触电阻: 60 mΩ MAX Appearance no damage Contact resistance: 60mΩ MAX |
| L | 耐湿性 Humidity | FFC/FPC 嵌合, 室温 40°C, 相对湿度 90%-95% 的空气放置 96 小时, 再回到正常室温 0.5 小时测试 Mate applicable FPC/FFC and expose to 40°C, Relative Humidity: 90%-95% for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 0.5 hours, after which the specified measurements shall be performed. | 外观无损坏 接触电阻: 60 mΩ MAX 耐电压满足 3.4.C 绝缘电阻: 500MΩ min Appearance no damage Contact resistance: 60mΩ MAX Dielectric Strength: Must meet 3.4.C Insulation Resistance: 500MΩ Min |
| M | 可焊性 Solder ability | 端子前端基准面 0.2mm 处侵入 235°C ± 5°C 锡槽中, 时间 2 ± 0.5sce Soldering time: 2 ± 0.5sce, Soldering Temperature: 235°C ± 5°C, 0.2mm from terminal tip | 粘敷面积最少 95% solder wetting ≥ 95% |
| N | 回焊高温测试 Resistance to Reflow Soldering Heat | Pre Heat: 150~180°C, 90 ± 30sec. Heat: 230°C Min., 30 ± 10sec. Peak Temp: 260+0/-5°C, 10sec. or less Duration: 3 cycles | 外观完好, 无损坏, 无变形. Appearance no damage. |
| P | 盐雾试验 Salt fog corrosion | 温度为: 35 ± 2°C 氯化钠溶液浓度为: 5 ± 1% (重量) 时间: 连续喷雾 48 小时 Temperature: 35 ± 2°C Concentration of sodium chloride (NaCl): 5 ± 1% (weight). Spray continuously for 48 hours. | 金属表面无严重锈蚀 The metal surface shall free of serious rust corrosion |

| 版次 (Edition) | 变更摘要 (Change The Content) | 日期 (Date) |
|--------------|---------------------------|------------|
| 1 | 增加料号说明 | 2015/1/28 |
| 2 | 电镀方式由全金升级为点镀金 | 2021/12/02 |



| 序号 (NO.) | 品名 (Name) | 材质 (Material) |
|----------|---|------------------------------------|
| ① | 0.5Pitch Easy-on Type Housing (H=2.0) | LCP U94V-0 本色 Natural |
| ② | 0.5Pitch Easy-on Type Terminal (H=2.0) | 铜合金/表面镀锡 Copper Alloy/ Tin Plating |
| ③ | 0.5Pitch Easy-on Type Actuator (H=2.0) | LCP U94V-0 黑色 Black |
| ④ | 0.5 Pitch Easy-on Type Fitting Wall (H=2.0) | 铜合金/表面镀锡 Copper Alloy/ Tin Plating |



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): ≤0.03 Ω.
5. 绝缘电阻 (Insulation resistance): ≥500M Ω.
6. 产品料号 (Product material No.): XW05202-*** ** ** **

| | | |
|--------------------|----|------------------------------------|
| NO OF CKT (产品PIN数) | 00 | 后盖有1000个脚 (Actuator with 1000-PIN) |
| Plating (电镀方式) | 0W | 后盖无1000个脚 (Actuator without 1000) |

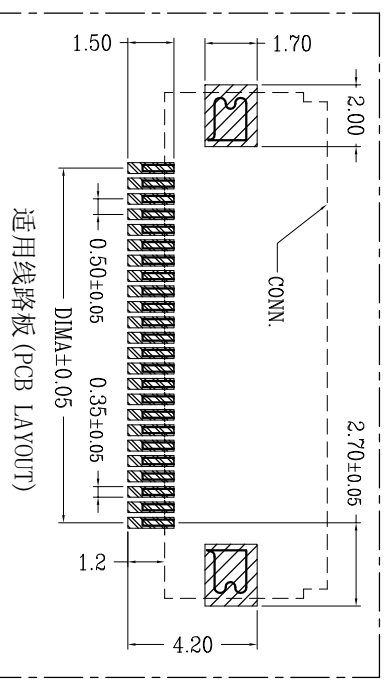
0: 端子全雾锡 (Terminal all mist tin)

1: 端子全金 (Terminal OVERALL)

6: 端子点镀金



一般公差 (TOLERANCE)
X ±0.50 XX ±1.0
X ±0.20 XXX ±0.6
ANGLES ±1°



| CKT | DIMA | DIMB | DIMC | CKT | DIMA | DIMB | DIMC |
|-----|-------|-------|-------|-----|-------|-------|-------|
| 4 | 1.50 | 2.60 | 6.40 | 34 | 16.50 | 17.60 | 21.40 |
| 5 | 2.00 | 3.10 | 6.90 | 35 | 17.00 | 18.10 | 21.90 |
| 6 | 2.50 | 3.60 | 7.40 | 36 | 17.50 | 18.60 | 22.40 |
| 7 | 3.00 | 4.10 | 7.90 | 37 | 18.00 | 19.10 | 22.90 |
| 8 | 3.50 | 4.60 | 8.40 | 38 | 18.50 | 19.60 | 23.40 |
| 9 | 4.00 | 5.10 | 8.90 | 39 | 19.00 | 20.10 | 23.90 |
| 10 | 4.50 | 5.60 | 9.40 | 40 | 19.50 | 20.60 | 24.40 |
| 11 | 5.00 | 6.10 | 9.90 | 41 | 20.00 | 21.10 | 24.90 |
| 12 | 5.50 | 6.60 | 10.40 | 42 | 20.50 | 21.60 | 25.40 |
| 13 | 6.00 | 7.10 | 10.90 | 43 | 21.00 | 22.10 | 25.90 |
| 14 | 6.50 | 7.60 | 11.40 | 44 | 21.50 | 22.60 | 26.40 |
| 15 | 7.00 | 8.10 | 11.90 | 45 | 22.00 | 23.10 | 26.90 |
| 16 | 7.50 | 8.60 | 12.40 | 46 | 22.50 | 23.60 | 27.40 |
| 17 | 8.00 | 9.10 | 12.90 | 47 | 23.00 | 24.10 | 27.90 |
| 18 | 8.50 | 9.60 | 13.40 | 48 | 23.50 | 24.60 | 28.40 |
| 19 | 9.00 | 10.10 | 13.90 | 49 | 24.00 | 25.10 | 28.90 |
| 20 | 9.50 | 10.60 | 14.40 | 50 | 24.50 | 25.60 | 29.40 |
| 21 | 10.00 | 11.10 | 14.90 | 51 | 25.00 | 26.10 | 29.90 |
| 22 | 10.50 | 11.60 | 15.40 | 52 | 25.50 | 26.60 | 30.40 |
| 23 | 11.00 | 12.10 | 15.90 | 53 | 26.00 | 27.10 | 30.90 |
| 24 | 11.50 | 12.60 | 16.40 | 54 | 26.50 | 27.60 | 31.40 |
| 25 | 12.00 | 13.10 | 16.90 | 55 | 27.00 | 28.10 | 31.90 |
| 26 | 12.50 | 13.60 | 17.40 | 56 | 27.50 | 28.60 | 32.40 |
| 27 | 13.00 | 14.10 | 17.90 | 57 | 28.00 | 29.10 | 32.90 |
| 28 | 13.50 | 14.60 | 18.40 | 58 | 28.50 | 29.60 | 33.40 |
| 29 | 14.00 | 15.10 | 18.90 | 59 | 29.00 | 30.10 | 33.90 |
| 30 | 14.50 | 15.60 | 19.40 | 60 | 29.50 | 30.60 | 34.40 |
| 31 | 15.00 | 16.10 | 19.90 | 61 | 30.00 | 31.10 | 34.90 |
| 32 | 15.50 | 16.60 | 20.40 | 64 | 31.50 | 32.60 | 36.40 |
| 33 | 16.00 | 17.10 | 20.90 | 65 | 32.00 | 33.10 | 36.90 |

| | | | |
|-----------------|-------------------------|------------|--------|
| 品名 (TITLE) | 0.5 Pitch连接器式下接 (H=2.0) | 图例 (DR) | Anlan |
| 料号 (DRAWING NO) | XW05202-*** ** ** ** | 审核 (APPD) | 李绍宗 |
| 比例 (SCALE) | 1:1 | 校对 (CHECK) | 黄志明 |
| 单位 (UNITS) | mm | 张数 (SHEET) | 1 OF 1 |
| 尺寸 (SIZE) | A4 | REV | A |