



## PRODUCT SPECIFICATION OF OUPIIN

# PRODUCT SPECIFICATION

## (產品規格書)

| 產品名稱 Description                          | 產品料號 Part No. | 圖號 Drawing No. |
|---|---------------|----------------|
| 2532-B Series<br>FFC/FPC Connector 1.25mm | 2532-BxxTxU   | S2320210610-01 |

| PRODUCT NAME<br>(產品名稱)                              | DOCUMENT No.:<br>(文件編號) | Rev.<br>(版本)    | OUPIIN           |
|---|-------------------------|-----------------|------------------|
| 2532-B Series<br>FFC/FPC Connector 1.25mm<br>(RoHS) | 2532spec-B              | A (I676)        | (歐品)             |
|   | Approved<br>(核準)        | Checked<br>(審核) | Prepared<br>(製作) |
|   | Q.A. Section Chief      | Ruru Chen       | 2021.08.16       |



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## 1. SCOPE (範圍)

This product specification defines the product performance and the test methods to ascertain the performance of the 2532-B Series FFC/FPC Connector 1.25mm , which is designed and manufactured by Oupiin Electronic Co.,Ltd.

(本產品規格書規定了由歐品電子有限公司生產的2532-B Series FFC/FPC Connector 1.25mm 型連接器,產品的特性及測試方法.)

## 2. REFERENCE DOCUMENTS (參考文件)

EIA 364                      Test method for electrical components  
(電子零件測試方法)

## 3. FEATURE & DIMENSIONS (特徵及尺寸)

### 3.1. PRODUCT DIMENSION (產品尺寸)

These connectors shall have the dimensions as shown in drawing.

(本產品的相關尺寸參考圖面.)

### 3.2. PCB/PANEL LAYOUT (印刷電路板佈局)

The recommended PCB layout is shown in drawing.

(本產品適用的 PCB layout 參考圖面.)

### 3.3. BILL OF MATERIAL (材料清單)

Harmful material control follow the requirement of RoHS. The bill of material and product number is described in drawing.

(有害物質控制符合RoHS指令要求.本產品使用的材料參考附件.)

### 3.4. MECHANICAL & ELECTRICAL CHARACTERISTIC (機械及電氣特性)

The connector shall have the mechanical and electrical performance as described in drawing.

(本產品的機械及電氣特性見圖面.)

### 3.5. PACKAGING (包裝)

Products shall be packaged according to requirements specified in purchase order for safe delivery, connector container and the packaging method are shown in package specification.

(產品可依客戶指定要求包裝, 包裝材料與包裝方式參見產品包裝規範.)



## **PRODUCT SPECIFICATION OF OUPIIN**

### **3.6 RATING CURRENT AND RATING VOLTAGE 額定電流與額定電壓**

Rating current is 0.5 A, rating voltage is 50V DC/AC.

額定電流 0.5 A，額定電壓 50V DC/AC。

### **3.7 STORAGE AND OPERATING TEMPERATURE 儲存與使用溫度**

Operating Temperature : -25°C~+85°C

Storage Temperature :-10°C~+40°C, Relative humidity: ≤80%

操作溫度：-25°C~+85°C

儲存溫度：-10°C~+40°C，相對濕度不大於80%

## **4. PERFORMANCE AND TEST DESCRIPTION (性能及測試)**

### **4.1. REQUIREMENT (要求)**

Product is designed to meet electrical, mechanical, and environmental performance requirements specified in **Table I**.

(本產品設計符合附表一所列的機械，電氣及環境要求.)

### **4.2. TEST CONDITION (測試條件)**

Unless otherwise specified, all tests shall be performed at ambient environmental conditions.

(除非特別注明，所有測試在室溫條件下完成.)

### **4.3. SAMPLE SELECTION (樣品選擇)**

Test samples shall be selected at random from current production. No test samples shall be reused.

Samples are pre-conditioned with 10cycles of durability. Each group shall be containing 5 test samples.

(測試樣品從現生產的產品中隨機抽取，所有測試過的樣品不得重複使用。樣品已預先插拔10次，每組測試有5個樣品.)



## PRODUCT SPECIFICATION OF OUPIIN

**Table I: Test Requirements and Procedures**

(附表一:測試要求)

| Items<br>(項目)                               | Requirements<br>(要求)  | Test Methods<br>(檢測方法)  |
|---|---|---|
| 1. Confirmation of Product<br>(產品確認)        | Product shall be conforming to the requirements of applicable product drawing.<br>產品必須滿足相關檔的規定              | Check the dimensions and functions per applicable product drawing in your eyes.<br>目視，尺寸及功能依產品圖面檢查  |
| 2. Contact Resistance<br>(接觸阻抗)             | 30 mΩ Max.<br>30 mΩ 最大  | EIA-364-23<br>Mate applicable FPC/FFC and measure by dry circuit, 20mV Max, 10mA.<br>將樣品與適合的 FPC/FFC 連接，並通過一個封閉回路中測試：電流 10 mA，電壓 20 mV max.           |
| 3. Insulation Resistance<br>(絕緣阻抗)          | 500 MΩ Min.<br>500 MΩ 最小  | EIA-364-21<br>Mate applicable FPC/FFC and apply 500V DC between adjacent terminal or ground.<br>將樣品與適合的 FPC/FFC 連接，以電壓 500V DC 測試產品端子間以及端子與接地間的電阻     |
| 4. Dielectric Withstanding Voltage<br>(耐電壓) | No Breakdown<br>無損壞   | EIA-364-20<br>Mate applicable FPC/FFC, apply 500V AC for 1 minute between adjacent terminal or ground.<br>將樣品與適合的 FPC/FFC 連接，相鄰端子間可承受 500V AC，時間 1 分鐘 |
| 5. Mating/Un-mating Force<br>(插入力/拔出力)      | Mating force : Pin*0.2kgf Max<br>Un-mating force : Pin*0.03kgf Min<br>插入力最大：Pin*0.2kgf<br>拔出力最小：Pin*0.03kgf | Insert the actuator, pull the FFC/FPC at a rate of 25±3mm per minute.<br>使用 FFC/FPC 以每分鐘 25±3mm 速度進行插入力與拔出力測試   |
| 6. Terminal Retention Force<br>(端子保持力)      | 0.3 kgf Min<br>0.3 kgf 最小   | Apply axial pull out force at the rate of 25±3 mm/minute on the terminal assembled in the housing.<br>端子與基座組裝後，以每分鐘 25±3mm 速度將端子垂直拔出。                 |



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|  |  |   |
|--|--|---|
| <p>7. Durability<br/>(耐久性)</p>           | <p>After testing, no damage.<br/>Contact Resistance: 50 mΩ Max.<br/>測試後，產品外觀無損壞，<br/>接觸阻抗最大 50mΩ</p>   | <p>Repeat mate and unmated for connector 20 cycles, at a speed of 10 cycles/minute.<br/>重復進行配合產品 20 次插拔，速度每分鐘 10 次。</p>   |
| <p>8. Temperature Cycling<br/>(冷熱衝擊)</p> | <p>After testing, no damage, Contact Resistance 60 mΩ max. Dielectric Strength &amp; Insulation Resistance should be OK.<br/>測試後，產品無損壞，接觸阻抗：60 mΩ 最大，耐電壓、絕緣阻抗測試 OK</p>                       | <p>Temperature range from -55±3°C to +85±3°C .Start from -55±3°C, after 30 min. change to +85±3°C; Total 5 cycles.<br/>溫度變化範圍： -55±3°C~+85±3°C；<br/>從 -55±3°C 開始，30 分鐘後換到+85±3°C；共 5 個循環。</p> |
| <p>9. Humidity<br/>(恆溫恆濕)</p>            | <p>After testing, no damage, Contact Resistance 60 mΩ max. Dielectric Strength should be OK, Insulation Resistance should be 20 MΩ min<br/>測試後，產品無損壞，接觸阻抗：60 mΩ 最大，耐電壓測試 OK，絕緣阻抗 20MΩ 最小</p> | <p>Temperature :60±2°C<br/>溫度：60±2°C<br/>Relative Humidity : 90-95%;<br/>相對濕度：90-95%<br/>Duration : 96 Hours.,<br/>時間：96 小時</p>   |
| <p>10. Salt Spray<br/>(鹽霧)</p>           | <p>After testing, no damage, Contact Resistance 50 mΩ max. Dielectric Strength &amp; Insulation Resistance should be OK.<br/>測試後，產品無損壞，接觸阻抗：50 mΩ 最大，耐電壓、絕緣阻抗測試 OK</p>                       | <p>5±1% salt concentration ,24±4 hours , 35±2°C<br/>鹽水濃度(重量比)5±1%，時間 24±4 小時，溫度 35±2°C</p>  |
| <p>11. Heat Resistance<br/>(耐熱性)</p>     | <p>After testing, no damage, Contact Resistance 50 mΩ max. Dielectric Strength &amp; Insulation Resistance should be OK.<br/>測試後，產品無損壞，接觸阻抗：50 mΩ 最大，耐電壓、絕緣阻抗測試 OK</p>                       | <p>Subject product to 85±2°C for 96 hours continuously<br/>產品置於 85±2°C 連續 96 小時。</p>  |
| <p>12. Cold Resistance<br/>(耐冷性)</p>     | <p>After testing, no damage, Contact Resistance 60 mΩ max. Dielectric Strength &amp; Insulation Resistance should be OK.<br/>測試後，產品無損壞，接觸阻抗：60 mΩ 最大，耐電壓、絕緣阻抗測試 OK</p>                       | <p>Subject product to -40±2°C for 96 hours continuously<br/>產品置於 -40±2°C 連續 96 小時。</p>  |
| <p>13. Solder ability<br/>(可焊性)</p>      | <p>There shall have a solder coverage of 95% minimum。<br/>產品在測試完成後，焊接部位粘錫面積大於 95%。</p>   | <p>Soldering time: 3±0.5 Seconds<br/>焊接時間：3±0.5 秒<br/>Soldering Temperature: 245±5°C.<br/>焊接溫度：245±5°C.</p>   |



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Material Housing : I676-PA66 Vydyne 21SPC(NA)

[SGS Test Report Click here](#)

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Vydyne® 21SPC  
polyamide 66



| Physical                               | Dry      | Conditioned | Unit              | Test Method |
|--|----------|-------------|-------------------|-------------|
| Density                                | 1.14     | --          | g/cm <sup>3</sup> | ISO 1183    |
| Molding Shrinkage                      |          |             |                   | ISO 294-4   |
| Across Flow : 23°C, 2.00 mm            | 1.7      | --          | %                 |             |
| Flow : 23°C, 2.00 mm                   | 1.8      | --          | %                 |             |
| Water Absorption                       |          |             |                   | ISO 62      |
| 24 hr, 23°C                            | 1.2      | --          | %                 |             |
| Equilibrium, 23°C, 50% RH              | 2.4      | --          | %                 |             |
| Outdoor Suitability (All Colors)       | f2       | --          |                   | UL 746C     |
| Mechanical                             | Dry      | Conditioned | Unit              | Test Method |
| Tensile Modulus (23°C)                 | 2800     | 1800        | MPa               | ISO 527-1   |
| Tensile Stress                         |          |             |                   | ISO 527-2   |
| Yield, 23°C                            | 86.0     | 56.0        | MPa               |             |
| Break, 23°C                            | 56.0     | 46.0        | MPa               |             |
| Tensile Strain (Yield, 23°C)           | 4.8      | 22          | %                 | ISO 527-2   |
| Nominal Tensile Strain at Break (23°C) | 23       | 87          | %                 | ISO 527-2   |
| Flexural Modulus (23°C)                | 2900     | 1500        | MPa               | ISO 178     |
| Flexural Strength (23°C)               | 80.0     | 50.0        | MPa               | ISO 178     |
| Poisson's Ratio                        | 0.40     | --          |                   | ISO 527     |
| Impact                                 | Dry      | Conditioned | Unit              | Test Method |
| Charpy Notched Impact Strength         |          |             |                   | ISO 179/1eA |
| -30°C                                  | 5.0      | 7.0         | kJ/m <sup>2</sup> |             |
| 23°C                                   | 6.0      | 20          | kJ/m <sup>2</sup> |             |
| Charpy Unnotched Impact Strength       |          |             |                   | ISO 179/1eU |
| -30°C                                  | No Break | No Break    |                   |             |
| 23°C                                   | No Break | No Break    |                   |             |
| Notched Izod Impact Strength           |          |             |                   | ISO 180     |
| -30°C                                  | 5.0      | 7.0         | kJ/m <sup>2</sup> |             |
| 23°C                                   | 6.0      | 20          | kJ/m <sup>2</sup> |             |



# PRODUCT SPECIFICATION OF OUPIIN

Material Housing :UL

Component - Plastics

E70062

**SOLUTION INC**

3000 OLD CHEMSTRAND RD, CANTONMENT FL 32533

**21SPC(a)(f2)**

Polyamide 66 (PA66), "VYDYNE"

| Color | Min Thk (mm) | Flame Class | HMI | HAI | RTI Elec | RTI Imp | RTI Str |
|-------|--------------|-------------|-----|-----|----------|---------|---------|
| ALL   | 0.40         | V-2         | -   | -   | 65       | 65      | 65      |
|       | 0.71         | V-2         | 4   | 0   | 130      | 75      | 85      |
|       | 1.5          | V-2         | 3   | 0   | 130      | 75      | 85      |
|       | 3.0          | V-2         | 3   | 0   | 130      | 75      | 85      |

Comparative Tracking Index (CTI): 0

Dimensional Stability (%): 1.6

High-Voltage Arc Tracking Rate (HVTR): 0

High Volt, Low Current Arc Resis (D495): 5

Dielectric Strength (kV/mm): -

Volume Resistivity (10<sup>x</sup> ohm-cm): -

**(a) - Virgin and regrind up to 50% by weight have the same basic material characteristics. Outdoor rating does not apply to regrind material.**

**(f2) - Subjected to one or more of the following tests: Ultraviolet Light, Water Exposure or Immersion in accordance with UL 746C, where the acceptability for outdoor use is to be determined by UL.**

ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

Report Date: 1979-05-24  
Last Revised: 2008-07-02

Underwriters Laboratories Inc®





# PRODUCT SPECIFICATION OF OUPIIN

Material Contact : I676-C5191(6)

[SGS Test Report Click here](#)

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**宁波兴业盛泰集团有限公司产品品质保证书**

本保证书希妥善保管，如对我们公司的产品品质有异议，持保证书在一个月内在内与我公司  
 联系，本公司将竭诚为您服务，本保证书盖章有效（复印件无效） No ZBD202108090203

客户名称: 乐清市朝阳贸易有限公司 化学成分 (%) 杂质总和 0.16-0.20

|       |                     |     |                |          |             |     |             |
|-------|---------------------|-----|----------------|----------|-------------|-----|-------------|
| 结算单号: |                     | 铅Pb | 0.002          | 锌Zn      | 0.01-0.02   | 铁Fe | 0.002       |
| 发货日期: | <u>2021-08-09</u>   | 锡Sn | 5.86-5.90      | 磷P       | 0.140-0.166 | 铝Al | <0.0005     |
| 产品批号: | <u>A2107/04-014</u> | 镉Cd | 0.00013-0.0002 | 铜Cu+Sn+P | ≥99.5       | 镍Ni | 0.145-0.160 |
| 产品牌号: | <u>C5191</u>        |     |                |          |             |     |             |

产品规格: 0.25X200mm 力学性能及工艺性能:

|       |                  |           |            |        |            |
|-------|------------------|-----------|------------|--------|------------|
| 产品状态: | <u>H</u>         | 抗拉强度N/mm2 | <u>643</u> | 伸长率%   | <u>27</u>  |
| 产品数量: | <u>14</u> 件      | 杯突值mm     |            | 维氏硬度HV | <u>204</u> |
| 产品重量: | <u>5399.6</u> KG | 导电率%IACS  |            | 屈服强度   |            |

保质期: 2022-02-09 表面质量与公差 (mm)

检验员: 29 厚度公差 -0.01 宽度公差  表面质量 合格

执行标准:  等级: A 制单人: 孙华萍 填单日期: 2021-08-09

备注:

单位地址: 浙江省慈溪市杭州湾新区金溪路 联系电话: 8008574311 网址: http://www.cn-shine.com

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