



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.
PCB Socket 2.54mmX2.54mm (0.100"X0.100") Pitch Dip Type Connector	2044-2XxxGxxSA	2044-D0000-003

PRODUCT NAME (產品名稱)	DOCUMENT No.: (文件編號)	Rev. (版本)	OUPIIN
PCB Socket 2.54mmX2.54mm (0.100"X0.100") Pitch Dip Type Connector (RoHS)	Q2041-PSS-001	H (I800)	(歐品)
	Approved (核準)	Checked (審核)	Prepared (製作)
	Q.A. Section Chief	Pandy Wu	2021.03.29



PRODUCT SPECIFICATION OF OUPIIN

1. SCOPE (範圍)

This product specification defines the product performance and the test methods to ascertain the performance of the PCB Socket 2.54mmX2.54mm(0.100"X0.100") pitch DIP type connector, which is designed and manufactured by Oupiin Electronic Co.,Ltd. This product specification is applicable but not only for those part numbers which be shown in the cover page.

(本產品規格書規定了由歐品電子有限公司生產的 PCB Socket 2.54mmX2.54mm(0.100"X0.100") pitch DIP型連接器,產品的特性及測試方法。本產品規格書適用於但不局限於封面所顯示的產品料號。)

2. REFERENCE DOCUMENTS (參考文件)

MIL-STD-1344	Test method for electrical connector	電子連接器測試方法
MIL-STD-202	Test method for electrical components	電子零件測試方法
EIA364	Test method for electrical components	電子零件測試方法
JIS C 0051	Test method for electrical components	電子零件測試方法
MIL-G-45204C	Specification for gold plating	鍍金規格
IEC-512-3	IEC standard for current carrying capacity tests	IEC電流測試標準
QQ-N-290A	Specification for nickel plating	鍍鎳規格
MIL-P-81728A	Specification for tin/lead plating	鍍錫鉛規格
MIL-T-10727B	Specification for tin plating	鍍錫規格
UL1977	UL standard for safety of attachment plug and receptacle	UL安規要求標準
EN/ISO5961	Determination of total lead & cadmium content	總鉛和總鎘含量測定
EN1122	Determination of total lead & cadmium content	總鉛和總鎘含量測定
EN13346	Determination of heavy metals content	重金屬含量測定
EPA3052	Determination of total lead & cadmium content	總鉛和總鎘含量測定

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 參見圖面。)

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。)



PRODUCT SPECIFICATION OF OUPIIN

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。)

3.6. RATING CURRENT AND RATING VOLTAGE (額定電流與額定電壓)

Rating current is 2.0A, rating voltage is 150V DC/ACRMS.

額定電流 2.0A，額定電壓150V DC/ACRMS

3.7. STORAGE AND OPERATING TEMPERATURE (儲存與使用溫度)

Temperature range: -55°C~+105°C, including terminal temperature rise for rating current.

溫度範圍：-55°C~+105°C，包含接觸端子的額定電流溫升。

4. Environmental (環境要求)

4.1. SOLDERABILITY (可焊性)

Connectors meet solder-ability to EIA-364-52, and shall be free of contaminants.

產品可焊性符合 EIA-364-52 標準規定的相關要求，表面不得有污染物。

4.2. RESISTANCE TO SOLDER HEAT (耐焊接熱)

See table three for resistance to solder heat detail

耐焊接熱詳情請見表三

5. PERFORMANCE AND TEST DESCRIPTION (性能及測試)

5.1. 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。)



PRODUCT SPECIFICATION OF OUPIIN

5.2. 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)

5.3. 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。)

5.4. TEST SEQUENCE (測試順序)

Product qualification test sequence as shown in Table II.
(產品品質測試順序見附表二。)



PRODUCT SPECIFICATION OF OUPIIN

Table I: Test Requirements and Procedures

(附表一:測試要求)

Items (項目)	Requirements (要求)	Test Methods (檢測方法)
1. Confirmation of Product (產品確認)	Product shall be conforming to the requirements of applicable product drawing. 產品必須滿足相關檔的規定	Check the dimensions and functions per applicable product drawing in your eyes. 目視，尺寸及功能依產品圖面檢查
2. Contact Resistance (接觸阻抗)	20 mΩ Max. initial. 初始狀態最大 20 mΩ。	Subject mated contacts assembled in housing to closed circuit of 100 mA max. 20 mV max. Per EIA-364-06. 所述固定在外殼裡的 端子連結到一個封閉回路中測試，電流 100 mA max，電壓 20 mV max。 適用：EIA-364-06
3. Insulation Resistance (絕緣阻抗)	1000 MΩ Min. 最小 1000 MΩ。	Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector. (500 V DC±10%). Per EIA-364-21 測試產品相鄰端子間以及端子與接地間的電阻，(500 V DC±10%) 適用：EIA-364-21。
4. Dielectric Withstanding Voltage (耐電壓)	Connector must withstand test potential of 1000 VAC RMS for 1 minute, current leakage must be 0.2mA Max. 產品必須承受測試電壓 1000 VAC RMS，時間 1 分鐘，漏電流不大於 0.2 mA。	Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector. Per EIA-364-20. 對產品相鄰端子間以及端子與接地間加載電壓，並測試其漏電流。適用：EIA-364-20。
5. Durability (Repeated Mating/Un-mating) (耐久性)	R/A Power Pin :1336 g Min 彎式電源 PIN:1336g 最小 Vert Power Pin:754g Min 直式電源 PIN:754g 最小	Repeat mate and unmated for connector 100 cycles, at a speed of 10 cycles per minute. 重復進行配合產品 100 次插拔，速度每分鐘 10 次。



PRODUCT SPECIFICATION OF OUPIIN

<p>6. Connector Pin Mating /Un-mating Force (單支插入力/拔出力)</p>	<p>Mating force: 1.7N/Pin Max. Un-mating force: 0.2N/Pin Min. 插入力最大 1.7N/Pin , 拔出力最小 0.2 N/Pin 。</p>	<p>At a speed of 25.4 mm/minute, apply axial insert the mating part into fully or pull out from the subject product. 以25.4 mm/分鐘的速度，軸向完全插入對配外掛程式到被測產品中或從被測產品中拔出。</p>
<p>7. Contact Retention Force (端子保持力)</p>	<p>2 N/Pin. Min. 每支最小 2 N 。</p>	<p>Apply axial pull out force at a speed of 25.4mm/minute on the contact assembled in the housing. 以25.4mm/分鐘的速度施加軸向拉力從塑膠本體上拔出端子。</p>
<p>8. Vibration Sinusoidal Low Frequency 低頻正弦振動</p>	<p>No electrical discontinuity greater than 1 μs shall occur, Contact Resistance: 30 mΩ Max. 不允許出現超過 1 μs 的瞬間斷開接觸阻抗最大 30 mΩ 。</p>	<p>Subject mated connector to 10-55-10 Hz traversed in 1 minute at 1.5 mm amplitude, 2 hours each of 3 mutually perpendicular plane, 10 mA potential applied. Per EIA-364-28. 對測試產品，在頻率變化每分鐘從 10-55-10 Hz, 振幅 1.5 mm 條件下，在互相垂直的三個面上，每個面 2 小時下測量，電流 10 mA 。</p> <p>適用： EIA-364-28 。</p>
<p>9. Thermal Shock (溫度衝擊)</p>	<p>After testing, no damage, Contact Resistance 30 mΩ Max. Dielectric Strength should be OK, Insulation Resistance should be 1000 MΩ Min. 測試後產品無損壞，接觸阻抗最大 30mΩ；耐電壓測試 OK，絕緣阻抗最小 1000 MΩ 。</p>	<p>Temperature range from -55°C to +105°C. Start from -55°C, after 30 minutes, change to +105°C; change time is no more than 30 seconds, total 100 cycles. Per EIA-364-32. 溫度變化範圍： -55°C~ +105°C。從 -55°C 開始，30 分鐘後換到+105°C，轉換時間不超過 30 秒 共 100 個循環。</p> <p>適用： EIA-364-32 。</p>
<p>10. Humidity (Steady State) (恆溫恆濕)</p>	<p>After testing, no damage, Contact Resistance 30mΩ Max. Dielectric Strength should be OK, Insulation Resistance should be 1000 MΩ Min. 測試後產品無損壞，接觸阻抗最大 30mΩ；耐電壓測試 OK，絕緣阻抗最小 1000 MΩ 。</p>	<p>Temperature:40\pm2°C Relative Humidity: 90-95%. Duration: 96 Hours. Per EIA-364-31 溫度： 40\pm2°C 。</p> <p>相對濕度： 90-95% 。</p> <p>持續時間： 96 小時 。</p> <p>適用： EIA-364-31</p>



PRODUCT SPECIFICATION OF OUPIIN

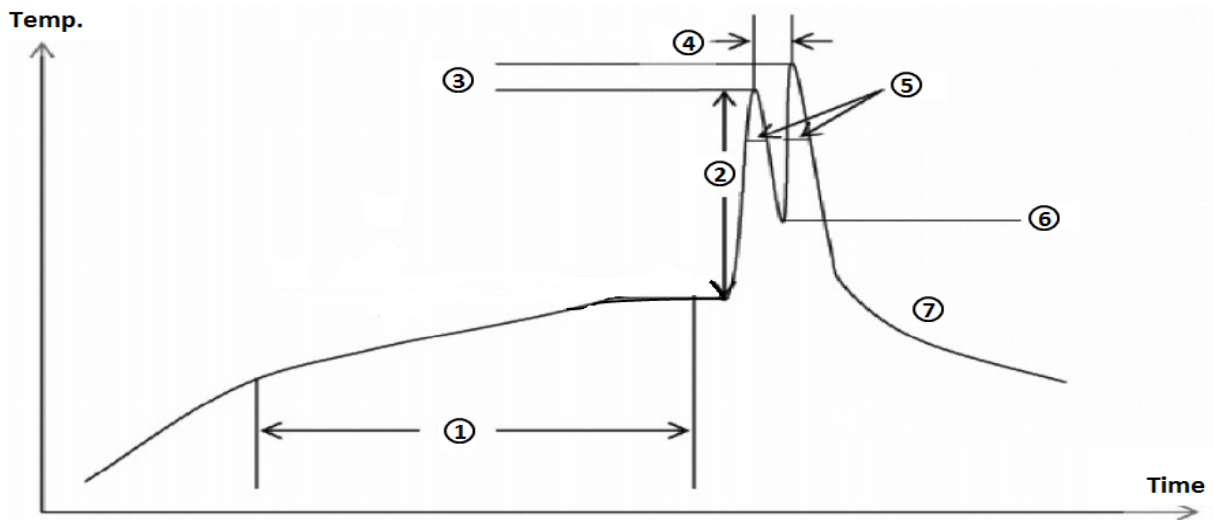
<p>11. Solder-ability (可焊性)</p>	<p>Appearance of the specimen shall be inspected after the test with the assistance of a magnifier capable of giving a magnification of 10 X for any damage such as pinholes, void or rough surface. 產品在測試完成後，在放大倍數為 10 倍的顯微鏡下，檢查外觀損壞如：小孔，空焊，外觀粗糙度。</p>	<p>Soldering time: 5 seconds. Temperature: 245±5°C. Per EIA-364-52 焊接時間：5 秒。 溫度：245±5°C。 適用：EIA-364-52</p>
<p>12. Salt Spray (鹽霧)</p>	<p>After testing, no damage, Contact Resistance 30mΩ Max. Dielectric Strength should be OK, Insulation Resistance should be 1000 MΩ Min. 測試後產品無損壞，接觸阻抗最大 30mΩ；耐電壓測試 OK，絕緣阻抗最小 1000 MΩ。</p>	<p>5±1% salt concentration 48 hours 35±2°C Per EIA-364-26 鹽水濃度 5±1%，時間 48 小時，溫度 35±2°C。 適用：EIA-364-26</p>
<p>13. High Temperature Life (高溫老化)</p>	<p>After testing, no damage, Contact Resistance 30mΩ Max. Dielectric Strength should be OK, Insulation Resistance should be 1000 MΩ Min. 測試後產品無損壞，接觸阻抗最大 30mΩ；耐電壓測試 OK，絕緣阻抗最小 1000 MΩ。</p>	<p>Subject product to 125±3°C for 457 hours continuously. Per EIA-364-17 產品置於 125±3°C 連續 457 小時。 適用：EIA-364-17</p>



PRODUCT SPECIFICATION OF OUPIIN

Table III : Weld the curve graph in crest

附表III：波峰焊曲線圖



- | | |
|----------------------------------|-------------------------|
| ① Preheat 80sec (1~2°C/s) | ⑤ Dip Time 3~6sec |
| ② $\Delta T < 150^\circ\text{C}$ | ⑥ $> 200^\circ\text{C}$ |
| ③ 235~265°C | ⑦ Cooling -5°C/s |
| ④ 1~3sec | |



PRODUCT SPECIFICATION OF OUPIIN

Material Housing : 023-PBT

[SGS Test Report Click here](#)


[如需 SGS 測試報告請點選此處](#)

长春化工(江苏)有限公司
 江苏省215537常熟经济开发区沿江工业区长春路
Chang Chun Chemical(Jiangsu) Co., Ltd.
 Changchun Rd. Riverside Industrial Park, Changshu Economy Development, Jiangsu 215537, P.R.C.

Certificate of Analysis
 We certify those products below which had passed the specification in our laboratory.

Product: PBTC Page: 1 / 1
 Grade: PBT 4830BKF
 Customer: 欧品电子(昆山)有限公司
 Order No.: 355391 Report Date: 2016.10.25
 Customer Order:

Items	Unit	Specification	Results
Lot No.			J160820B11
Specific Gravity		1.580~1.630	1.598
Tensile Strength (kgf/cm ²)		1000min.	1290
Tensile Elongation(%)		3.00min.	3.77
Flexural Strength (kgf/cm ²)		1600min.	1987
Flexural Modulus (kgf/cm ²)		75000min.	100739
Impact Strength (kgf-cm/cm)		7.50min.	8.52
Ash Content(%)		29.00~33.00	31.40
MI(2160g*260°C/10min)		15.00~35.00	26.38



Quantity 1,500
Total Quantity: 1,500

Approved by: *W. K. Chang* Signed by: *顾乾*
 No. : CQCC08501QA /Ver. : 1.0



PRODUCT SPECIFICATION OF OUPIIN

Material Housing :UL

Component - Plastics

E59481

CHANG CHUN PLASTICS CO LTD

7TH FL, 301 SONGKIANG RD, TAIPEI 104 TW

4830

Polybutylene Terephthalate (PBT), glass reinforced, "LONGLITE", furnished as pellets

Color	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
ALL	3.0-3.2	V-0	0	1	75	75	75

Comparative Tracking Index (CTI): **3**

Inclined Plane Tracking (IPT): -

Dielectric Strength (kV/mm): -

Volume Resistivity (10⁸ ohm-cm): -

High-Voltage Arc Tracking Rate (HVTR): **2**

High Volt, Low Current Arc Resis (D495): **7**

Dimensional Stability (%): -

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: 1987-09-01

Last Revised: 2006-08-02

© 2011 Underwriters Laboratories Inc.



IEC and ISO Test Methods

Test Name	Test Method	Units	Thickness Tested (mm)	Value
Flammability	IEC 60695-11-10	Class (color)	3.0-3.2	V-0 (ALL)
Glow-Wire Flammability (GWF1)	IEC 60695-2-12	C	-	-
Glow-Wire Ignition (GWI)	IEC 60695-2-13	C	-	-
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-
IEC Ball Pressure	IEC 60695-10-2	C	-	-
ISO Heat Deflection (1.80 MPa)	ISO 75-2	C	-	-
ISO Tensile Strength	ISO 527-2	MPa	-	-
ISO Flexural Strength	ISO 178	MPa	-	-
ISO Tensile Impact	ISO 8256	kJ/m ²	-	-
ISO Izod Impact	ISO 180	kJ/m ²	-	-
ISO Charpy Impact	ISO 179-2	kJ/m ²	-	-

© 2011 Underwriters Laboratories Inc.

The materials covered in this database are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. THE FINAL ACCEPTANCE OF THE COMPONENT IS DEPENDENT UPON ITS INSTALLATION AND USE IN COMPLETE PRODUCTS SUBMITTED TO UNDERWRITERS LABORATORIES.

Notice of Disclaimer



PRODUCT SPECIFICATION OF OUPIIN

Material Contacts : I800-C2680

[SGS Test Report Click here](#)

[如需 SGS 測試報告請點選此處](#)

杭州金超物资有限公司
产品质量检验报告
2016年11月14日

客户名称	昆山欧品			执行标准	JIS H 3100		重量	kg	
牌号	C2680-H	批号	H1020-48	规格状态	0.5*18.5	厚度公差 (mm)	-0.01	宽度公差 (mm)	-0.1
化 学 成 分 (%)									
元素	Cu	Fe	Pb	Sb	Bi	Zn			
示准	64.0-68.0	≤0.050	≤0.05	≤0.005	≤0.002	余量			
测	64.07	0.015	0.007	0.0001	0.0001	余量			
物 理 性 能									
目	抗拉强度 σ_b (N/mm ²)	延伸率 δ (%)	硬度值 Hv	晶粒度 (mm)					
测	480	19.5	149						

检验: 签发:

本质保单请妥善保管, 如对我司的产品品质有异议, 持此质保单在一个月內与我司联系, 本公司将竭诚为您服务
技质部联系电话 (TEL): 0575-84559726