

PRODUCT SPECIFICATION

(產品規格書)

Ordering information

| | | | | | | | |
|--------|-----------|-----------|---------|----------|----------------|-------------|-----------------|
| 2042- | 2* | 40 | G | 00 | S | P | A |
| Series | 1: Single | No. of | G: Gold | 00:Gold | S: Straight | Blank : Dip | A: Tray Package |
| Row | 2: Double | Pin Count | Plated | Flash | R: Right Angle | Type | B: Bulk Package |
| Row | | | T: Tin | 10:10 μ” | | P: Press | |
| | | | Plated | 15:15 μ” | | Fit Type | |
| | | | | 30:30 μ” | | | |

*HT : High temperature Plastic UL94V-0

| | | | |
|--|--------------------------------|------------------------|---------------------------|
| PRODUCT NAME (產品名稱) | DOCUMENT No.: (文件編號) | Rev. (版本) | OUPIIN (歐品) |
| P.C.B SOCKET 2.54mm*2.54mm (RoHS) | 2042spec-HT | B1 | |
| | Approved (核準) | Checked (審核) | Prepared (製作) |
| | Q.A. Section Chief | Amy Chiu | AUG.31/2010 |

| | |
|--|-------------|
| 1. SCOPE (範圍) | 3 |
| 2. REFERENCE DOCUMENTS (參考文件) | 3 |
| 3. FEATURE & DIMENSIONS (特徵及尺寸) | 3 |
| 3.1. <i>PRODUCT DIMENSION (產品尺寸)</i> | 3 |
| 3.2. <i>PCB/PANEL LAYOUT (印刷電路板佈局)</i> | 3 |
| 3.3. <i>BILL OF MATERIAL (材料清單)</i> | 3 |
| 3.4. <i>MECHANICAL & ELECTRICAL CHARACTERISTIC (機械及電器特性)</i> | 3 |
| 3.5. <i>PACKAGING (包裝)</i> | 3 |
| 3.6. <i>RATING CURRENT AND RATING VOLTAGE (額定電流與額定電壓)</i> | 4 |
| 3.7. <i>STORAGE AND OPERATING TEMPERATURE (儲存使用溫度)</i> | 4 |
| 4. Environmental (環境要求) | 4 |
| 4.1. <i>SOLDERABILITY (可焊性)</i> | 4 |
| 4.2. <i>RESISTANCE TO SOLDER HEAT (耐焊接熱)</i> | 4 |
| WAVE SOLDERING (波峰焊) | 4 |
| 1.Preheat (預熱) | 4 |
| 2.Soldering (焊接) | 4 |
| 3.Cool Down (冷卻) | 4 |
| 5. PERFORMANCE AND TEST DESCRIPTION (性能及測試) | 5 |
| 5.1. <i>REQUIREMENT (要求)</i> | 5 |
| 5.2. <i>TEST CONDITION (測試條件)</i> | 5 |
| 5.3. <i>SAMPLE SELECTION (樣品選擇)</i> | 5 |
| Table I: Test Requirements and Procedure | 6-7 |
| (附錄一: 測試要求) | |
| Table II: Material | 8-10 |
| (附錄二: 材料證明) | |

1. SCOPE (範圍)

This product specification defines the product performance and the test methods to ascertain the performance of the P.C.B SOCKET 2.54mm*2.54mm , 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 P.C.B SOCKET 2.54mm*2.54mm 型連接器,產品的特性及測試方法.)

2. REFERENCE DOCUMENTS (參考文件)

| | |
|---------------|---|
| MIL-STD-1344A | Test method for electrical connector (電子連接器測試方法) |
| MIL-STD-202F | 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) |

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.

Products required carrier tape should meet the proper specification per purchase order. Connector

container and the packaging specification is shown in package drawing.

(產品包裝可依客戶指定要求.本產品採用 Tray Packag 包裝，具體見包裝圖面.)

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/AC RMS.

額定電流 2.0A，額定電壓 150V DC/AC RMS。

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 MIL-STD-202F. Finish shall be free of contaminants.

(產品可焊性符合 MIL-STD-202F 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)

WAVE SOLDERING (波峰接)

Each cycle consists of three consecutive phases.(每個焊接週期包括三個連續的階段)

1. Preheat (預熱)

The steady temperature of the preheat zone is 90~125°C.(預熱區最終溫度控制在90~125°C)

2. Soldering (焊接)

To avoid the secondary tin-melting, the temperature on PCB upper surface is 160°C Max. for products with lead, or 200°C Max. for lead-free products. The temperature of the PCB bottom surface shall not be exceed 100°C more than the temperature of the PCB upper surface. The peak temperature is during 230~255°C for products with lead, or 255~265°C for lead-free products. The tin dip time is duration for 3~10 seconds.

(有鉛產品板面溫度不得超過160°C，無鉛產品板面溫度不得超過200°C，以防止貼片零件二次熔錫。板面溫度與板底的溫度溫差不得超過100°C。板下溫度峰值有鉛產品維持在230~255°C，無鉛產品控制在255~265°C。浸錫時間控制在3~10秒。)

3. Cool Down (冷卻)

Cool down shall not exceed 6°C per second.

(冷卻速度不超過6°C/秒.)

Note: (說明)

Device temperature measurements are referenced from the top-center of the package outer surface.

(設備溫度量測時以從頂部中間位置測量為準.)

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述的機械，電氣及環境要求。)

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；)

Table I: Test Requirements and Procedures
(附錄一: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 (最大.初態) | Subject mated contacts assembled in housing to closed circuit of 100 mA max. at open circuit voltage of 20 mV max. (所述固定在外殼裏的端子連結到一個封閉回路中測試：電流 100 mA，電壓 20 mV max.) |
| 3. Insulation Resistance (絕緣阻抗) | 1000 MΩ Min. (最小) | Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector. MIL-STD-202, Method 302, Condition B (500 V DC±10%). (測試產品端子間以及端子與接地間的電阻，適用：MIL-STD-202,方法 302，條件 B)(500V DC±10%) |
| 4. Dielectric Strength (耐電壓) | Connector must withstand test potential of 1000 V AC for 1 minute. Current leakage must be 0.5 mA max. (樣品必須承受測試電壓 1000V AC，時間一分鐘，漏電流不大於 0.5 mA.) | Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector. MIL-STD-202, Method 301. (測試產品端子間以及端子與接地間的電壓，適用：MIL-STD-202，方法 301。) |
| 5. Durability (Repeated Mating/Unmated) (耐久性) | Contact Resistance: 50 mΩ Max. after testing. (測試後接觸阻抗最大 50mΩ) | The sample should be mounted the tester and fully mated and unmated 100 cycles specified at the rate of 25mm/min (重復進行配合產品 100 次插拔.) |
| 6. Connector Mated / Unmated Insertion / Withdrawal Force (產品插拔力) | Insertion / Mated force : 1.0 N max. per contact Withdrawal / Unmated force : 0.2 N min. per contact 插入力: 1.0 N 最大 拔出力: 0.2 N 最小 | Measure force necessary to unmated between the counterparts connectors.. (軸向力以 25±3mm/分的速度從塑膠本體對插後拔出) |



PRODUCT SPECIFICATION OF OUPIIN

| | | |
|-------------------------------------|--|--|
| <p>7. Thermal shock (熱衝擊)</p> | <p>After testing, no damage, Contact Resistance 50 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: 50 mΩ 最大; 耐電壓測試 OK, 絕緣阻抗 1000MΩ 最小;)</p> | <p>Temperature range from -55°C to +85°C .Start from -55°C, after 30 min. change to +85°C; change time is no more than 30 seconds. Total 5 cycles. MIL-STD-202, Method 107D, condition A. (溫度變化範圍: -55°C~ +85°C; 從 -55°C 開始, 30 分鐘後換到+85°C; 轉換時間不超過 30 秒; 共 5 個循環.適用: MIL-STD-202, 方法 107D, 條件 A.)</p> |
| <p>8. Humidity (恆溫恆濕)</p> | <p>After testing, no damage, Contact Resistance 50 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: 50 mΩ 最大; 耐電壓測試 OK, 絕緣阻抗 1000MΩ 最小;)</p> | <p>Temperature :40±2 °C 96 hours. (溫度: 40±2 °C 96 小時) Relative Humidity : 90-95%; (相對濕度 : 90-95%;) Duration :96 Hours. MIL-STD-202, Method 108, (時間: 96 小時; MIL-STD-202, 方法 108。)</p> |
| <p>9. Salt Spray (鹽霧)</p> | <p>After testing, no damage, Contact Resistance 50 mΩ max.. (測試後,產品無損壞, 接觸阻抗: 50 mΩ 最大)</p> | <p>5±1% salt concentration 24±1 hours 35±2°C MIL-STD-202, Method 101 Condition B. (鹽水濃度 (重量比) 5±1%, 時間 24±1 小時, 溫度 35±2°C; MIL-STD-202, 方法 101 條件 B.)</p> |
| <p>10. 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. (樣品在測試完成後, 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: 3 to 5 Seconds (焊接時間: 3~5 秒) Peak Temperature: 260±5°C. (最高溫度: 260±5°C.)</p> |



PRODUCT SPECIFICATION OF OUPIIN

Material Housing : 043-PPA (Black)

[SGS Test Report Click here](#)

[如需 SGS 測試報告請點選此處](#)

| Report of Plastics Material Test (倡業塑膠材料測試報告) | | | |
|--|------------------------|---------------------|--------------|
| 客 戶 | 歐品電子(昆山)有限公司 | 材 質 | 高溫尼龍 |
| 批 號 | *** | 品 名 | HA 348 - FR |
| 試 驗 項 目 test item | 單 位 Unit | 測試方法 Test method | 數 據 Value |
| 艾氏衝擊強度 Izod impact | kg-cm/cm | ASTM D-256 | 8.8 |
| 彎曲彈性率 Flexctral Modulus | kg/cm ² | ASTM D-790 | 133787 |
| 彎曲彈性率 Flexctral Modulus | kg/cm ² | ASTM D-790 | 2660 |
| 抗張強度 Tensile Strength | kg/cm ² | ASTM D-638 | 1713 |
| 伸長率 Elongation , Break | % | ASTM D-638 | 3.9 |
| 融熔指數 Melt index | ° C | ASTM D-1238 | 15.4 |
| 熱變形溫度 H.D.T 18.5kg/cm ² | ° C | ASTM D-648 | 290 |
| 比重 Specific grarity | — | ASTM D-792 | 1.55 |
| 填充物含量 Filler content | % | — | 30 |
| 阻燃性 Flame retardants | — | UL-94 | v-0 |
| 線性收縮率 Linear Shrinkage | 10 ⁻³ mm/mm | ASTM D-955 | 0.24 |
| 成 形 參 考 條 件 | | | |
| 料缸溫度 | 模具溫度 | 乾燥溫度 | 乾燥時間 |
| 240~275 ° C | 40~100 ° C | 85°C | >4HR |
| 1. 衝擊強度條件=1/8inch 缺口試片 2. H.D.T. 條件=1/8inch 試片 3. MI條件= 315°C 4. 本性質表僅供參考 | | | |

核准: 李宗保

判定: 李宗保

製表: 陳姿蓉

T7-15版次: 1.0 修訂: 95.05.01



PRODUCT SPECIFICATION OF OUPIIN

Material Housing :UL

QMFZ2.E229058 - Plastics - Component

第 1 頁, 共 2 頁



ONLINE CERTIFICATIONS DIRECTORY

QMFZ2.E229058 Plastics - Component

Page Bottom

Plastics - Component

See General Information for Plastics - Component

HIGH PERFORMANCE CO LTD

5 JING-JIANN 1ST RD
KUAN-YIN INDUSTRIAL PARK
KUAN-YIN
TAOYUAN HSIEN, 328 TAIWAN

E229058

| Material Dsg | Color | Min. Thk mm | Flame Class | H | | RTI | | H | D | C | |
|--|--------|-------------------|----------------|---|---|------|------|-----|---|---|---|
| | | | | W | A | Elec | Mech | V | 4 | | |
| | | | | I | I | | Imp | Str | R | 5 | I |
| Liquid Crystal Polymer (LCP), 30% glass fiber reinforced, furnished as pellets. | | | | | | | | | | | |
| SL-5030 | WT, BK | 0.8 | V-0 | - | - | 130 | 130 | 130 | | | |
| | | 1.6 | V-0 | - | - | 130 | 130 | 130 | | | |
| Polyamide (PA), glass reinforced, furnished as pellets. | | | | | | | | | | | |
| HA 348 FR | NC | 1.6-1.76 | V-0 | - | - | 65 | 65 | 65 | | | |
| HP-2004FR | BK | 0.8-0.88 | V-0 | - | - | 65 | 65 | 65 | | | |
| Polyamide (PA), furnished as pellets. | | | | | | | | | | | |
| HP-1004FR | NC, BK | 0.8 | V-0 | - | - | 65 | 65 | 65 | | | |
| | | 3.2 | V-0 | - | - | 65 | 65 | 65 | | | |
| Polyamide 6 (PA6), 30% glass reinforced, furnished as pellets. | | | | | | | | | | | |
| MG306-14 | NC | 0.8-0.88 | HB | - | - | 65 | 65 | 65 | | | |
| Polyamide 66 (PA66), 30% glass reinforced, furnished as pellets. | | | | | | | | | | | |
| NF306-27 | NC | 0.8-0.88 | HB | - | - | 65 | 65 | 65 | | | |
| Polybutylene Terephthalate (PBT), glass reinforced, furnished as pellets. | | | | | | | | | | | |
| DG 3(XX) FR | BK | 1.6-1.76 | V-0 | 3 | 0 | 75 | 75 | 75 | | | 3 |
| DG 340 FR | BK | 1.6-1.76 | V-0 | 2 | 0 | 75 | 75 | 75 | | | 3 |
| Polybutylene Terephthalate (PBT), furnished as pellets. | | | | | | | | | | | |
| DG 300 FR | BK | 1.6-1.76 | V-0 | 3 | 0 | 75 | 75 | 75 | | | 0 |

(XX) - Two digits number between 00 and 40 (except 00 and 40) denotes glass filler content between 0% and 40%(except 0% and 40%).

Marking: Company name and material designation on container, wrapper or finished part.

Last Updated on 2007-03-26

Questions?

Notice of Disclaimer

Page Top

Copyright © 2007 Underwriters Laboratories Inc.®

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under
<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/showpage.html?name=QMFZ2.E229058&ccn...> 2007/3/27



PRODUCT SPECIFICATION OF OUPIIN

Material Contact : Copper Alloy (Phosphor Bronze)

[SGS Test Report Click here](#)

[如需 SGS 測試報告請點選此處](#)



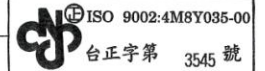
REPORT OF MATERIAL TEST

MILL CERTIFICATE

DATE: DEC.07.2004

Customer: 弘振企業股份有限公司

Commodity: C 5191 R PHOSPHOR BRONZE STRIP (H)



Applied Standard: CNS 9503 Phosphor Bronze Sheets, Plates and Strips

Chemical Analysis Test

| Work No. | Size of Product | | | P(%) | Sn(%) | Cu+Sn+P(%) | | | | |
|----------|-----------------|------------|-------------|-------|-------|------------|--|--|--|--|
| | Thickness (mm) | Width (mm) | Length (mm) | | | | | | | |
| | Standard | | | | | | | | | |
| 34C164A | 0.400 | 17.000 | | 0.129 | 5.837 | 99.978 | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Mechanical & Physical Test

| Work No. | Size of Product | | | Dimension Test | | Tension Test | | Hardness Test HV | Grain Size (mm) | Electric Conductivity (%) |
|----------|-----------------|------------|-------------|----------------|---------------------|---|----------------|------------------|-----------------|---------------------------|
| | Thickness (mm) | Width (mm) | Length (mm) | Thickness (mm) | Width (mm) | Tensile Strength (kgf/mm ²) | Elongation (%) | | | |
| | Standard | | | - | (-) 0.10 - (+) 0.00 | min. 58 | - | | | |
| 34C164A | 0.400 | 17.000 | | GOOD. | GOOD. | 58.75 | 26.02 | 187.0 - 189.0 | - | 15.4 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

QC Supervisor 廖建光

MINCHALI METAL INDUSTRY CO., LTD.
11, Pei Yuan Road, Chung Li City, Taiwan, R. O. C.