



PRODUCT SPECIFICATION

(產品規格書)

Ordering information

2566-F 71 G 00 D T

Series No. of G: Gold Plated 00:Gold Flash D: S.M.D. Type T: Tape & Reel Package
Pin Count

X1:JAN.26/2015.(試產)
A1:Nov.03/2015
A2:DEC.30/2016(Reflo 溫度)

PRODUCT NAME (產品名稱)	DOCUMENT No.: (文件編號)	Rev. (版本)	OUPIIN (歐品)
FFC/FPC Connector 0.3 mm ZIF Flip Lock Type (RoHS)	2566spec-F	A2(I570)	
	Approved (核準)	Checked (審核)	
	Q.A. Section Chief	Joseph Yen	Prepared 製作 DEC.30/2016



PRODUCT SPECIFICATION OF OUPIN

1. SCOPE (範圍)	3
2. REFERENCE DOCUMENTS (參考文件)	3
3. FEATURE & DIMENSIONS (特徵及尺寸)	3
3.1. PRODUCT DIMENSION (產品尺寸)	3
3.2. PCB/PANEL LAYOUT (印刷電路板佈局)	3
3.3. BILL OF MATERIAL (材料清單)	3
3.4. MECHANICAL & ELECTRICAL CHARACTERISTIC (機械及電器特性)	3
3.5. PACKAGING (包裝)	3
3.6. RATING CURRENT AND RATING VOLTAGE (額定電流與額定電壓)	4
3.7. STORAGE AND OPERATING TEMPERATURE (儲存使用溫度)	4
4. Environmental (環境要求)	4
4.1. SOLDERABILITY (可焊性)	4
4.2. RESISTANCE TO SOLDER HEAT (耐焊接熱)	4
INFRARED REFLOW (紅外線回流焊接)	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. REQUIREMENT (要求)	5
5.2. TEST CONDITION (測試條件)	5
5.3. SAMPLE SELECTION (樣品選擇)	5
Table I: Test Requirements and Procedure	6-7
(附錄一: 測試要求)	
Table II: Reflow soldering profile	8
(附錄二: 回流焊接曲線圖)	
Table III: Material	9-11
(附錄三: 材料證明)	



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 FFC/FPC Connector 0.3 mm ZIF Flip Lock Type, 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 FFC/FPC Connector 0.3 mm ZIF Flip Lock Type 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-202	Test method for electrical components (電子零件測試方法)
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.



PRODUCT SPECIFICATION OF OUPIN

(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 0.2 A, rating voltage is 30V DC/AC RMS.

額定電流 0.2 A，額定電壓 30V DC/AC RMS。

3.7 STORAGE AND OPERATING TEMPERATURE 儲存與使用溫度

Temperature range: -55°C~+85°C, including terminal temperature rise for rating current.

溫度範圍：-55°C~+85°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-202. Finish shall be free of contaminants.

(產品可焊性符合 MIL-STD-202 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)

INFRARED REFLOW (紅外線回流焊接)

Three cycles. Each cycle consisting of three consecutive phased.

(三個週期，每個週期包括三個連續的階段完成；)

1. Preheat (預熱)

Increase in temperature not to exceed 4°C per second.

(溫度增加不超過 4°C /秒。)

2. Soldering (焊接)

Maximum allowable time above reflow temperature of 150~200°C is 90~120 seconds. Maximum temperature in this interval is 260°C, not to exceed 5 seconds.

(回流焊溫度150~200°C時最長不超過90~120秒。最高溫度260°C時間不超過5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列的機械，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)	100 mΩ Max. initial (最大.初態)	Subject mated contacts assembled in housing to closed circuit of 10 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 10 mA，電壓 20 mV max.)
3. Insulation Resistance (絕緣阻抗)	50 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 250 V AC for 1 minute. Current leakage must be 0.5 mA max. (樣品必須承受測試電壓 250V 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: 100 mΩ Max. after testing. (測試後接觸阻抗最大 100mΩ)	The sample should be mounted the tester and fully mated and unmated 30 cycles specified at the rate of 10 cycle/min (重複進行配合產品 20 次插拔.)
6. FFC/FPC Retention Force (排線保持力)	Retention Force : Pos.* 0.15N Min.(最小)	Apply axial pull out force at a speed of 25±3 mm/minute on the FFC/FPC assembled in the housing. (軸向力以 25±3mm/分的速度從塑膠本體上拔出排線.)



PRODUCT SPECIFICATION OF OUPIN

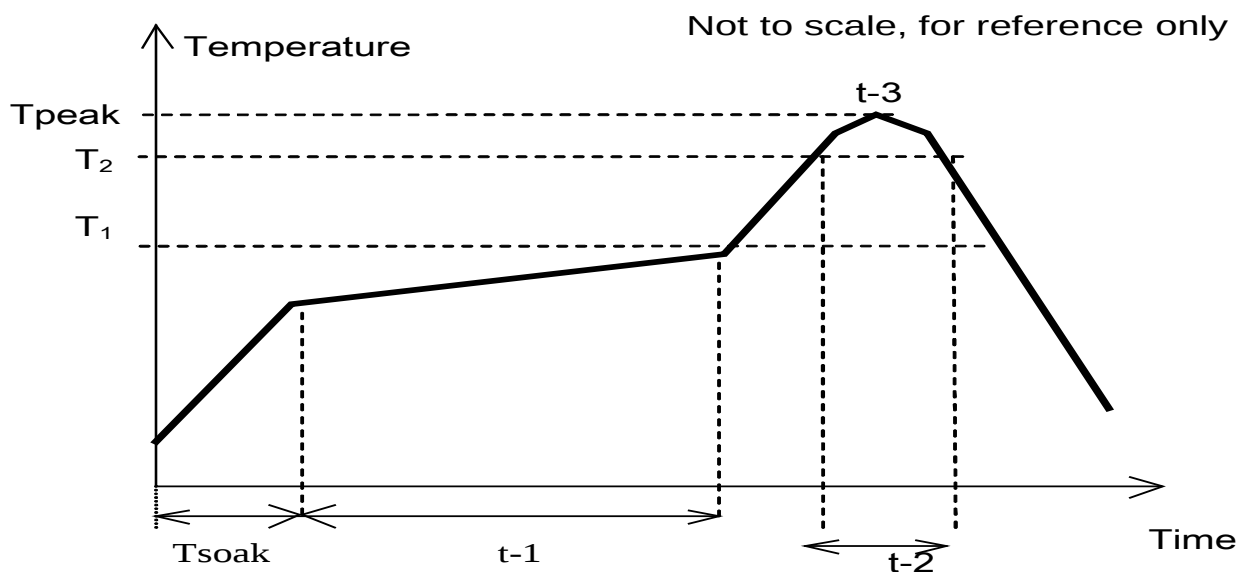
7. Thermal shock (熱衝擊)	After testing, no damage, Contact Resistance 100 m Ω max. (測試後,產品無損壞, 接觸阻抗: 100 m Ω 最大)	Temperature range from -55°C to +85°C .Start from -55°C, after 30 min. change to +85°C; change time is no more than 30 seconds. Total 5 cycles. MIL-STD-202, Method 107D, condition A. (溫度變化範圍: -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.)
8. Humidity (恆溫恆濕)	After testing, no damage, Contact Resistance 100 m Ω max. (測試後,產品無損壞, 接觸阻抗: 100 m Ω 最大)	Temperature :40 $\pm$ 2 °C 96 hours. (溫度: 40 $\pm$ 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。)
9. Salt Spray (鹽霧)	After testing, no damage, Contact Resistance 100 m Ω max.. (測試後,產品無損壞, 接觸阻抗: 100 m Ω 最大)	5 $\pm$ 1% salt concentration 48 $\pm$ 4 hours 35 $\pm$ 2°C MIL-STD-202, Method 101 Condition B. (鹽水濃度(重量比) 5 $\pm$ 1%, 時間 48 $\pm$ 4 小時, 溫度 35 $\pm$ 2°C; MIL-STD-202, 方法 101 條件 B.) IEC-364-26A
9. Solderability (可焊性)	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;)	Soldering time: 3 to 5 Seconds (焊接時間: 3~5 秒) Peak Temperature: 255 $\pm$ 5°C. (最高溫度: 255 $\pm$ 5°C.)

Table II : Reflow soldering profile

(附錄二 :回流焊接曲線圖)

Pb-free reflow profile requirements: (無鉛回流焊接曲線)

Parameter (參數)	Reference (參考)	Specification (規格)
Soak Time 25~150°C	Tsoak	60 Sec.
Time Above 150~200°C	t-1	60~90 Sec.
Time Above 200~260°C		30 Sec.
Time Above 230~245°C	t-2	20~40 Sec.
Peak temperature in reflow (回流焊接中最高溫度)	t-3 (Tpeak)	260°C (+0/-5°C) 3sec. or less



This profile is the minimum requirement for evaluating soldering heat resistance of components. Heat transfer method used for reflow soldering is hot air convection. The actual air temperatures used to achieve the specified profile largely dependent on the reflow equipment.

(這個曲線圖是評估原器件焊接抗熱的基本要求。應用在對流焊接中的熱傳遞方式是熱氣對流。達到特定曲線圖的實際溫度主要依賴於回流焊接設備。)

Material Housing : 066-LCP (E6808UHF)

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SUMIKASUPER® LCP E6808UHF

液晶聚合物
Sumitomo Chemical Co., Ltd.



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Technical Data

产品说明

SUMIKASUPER LCP is a thermotropic liquid crystalline polyester, showing the highest heat resistance among engineering plastics.

总体

材料状态	已商用：当前有效
资料 ¹	- Processing - Injection Molding (English) - Technical Datasheet - Electrical Properties (English) - Technical Datasheet - Feature List (English) - Technical Datasheet - Global Features (English) - Technical Datasheet - Other Characteristics (English) - Technical Datasheet - RTI (English) - Technical Datasheet (English)
UL 黄卡 ²	- E54705-100988641 - E249884-100962042
搜索 UL 黄卡	- Sumitomo Chemical Co., Ltd. - SUMIKASUPER® LCP
供货地区	- 北美洲 - 欧洲 - 亚太地区
填料/增强材料	玻璃纤维增强材料
性能特点	- 低翘曲性 - 低粘度 - 刚性, 高 - 良好的成型性能 - 流动性高 - 耐化学性良好 - 耐磨损性良好
用途	- 电气/电子应用领域 - 连接器 - 线圈骨架
形式	颗粒料
加工方法	注射成型

物理性能	额定值 单位制	测试方法
比重	1.72 g/cm ³	ASTM D792
收缩率		Internal Method
流动	0.22 %	
横向流动	1.0 %	
吸水率 (饱和)	0.020 %	ASTM D570
机械性能	额定值 单位制	测试方法
抗张强度 (屈服)	100 MPa	ASTM D638
伸长率 (断裂)	5.0 %	ASTM D638
弯曲模量 (23°C)	9400 MPa	ASTM D790
弯曲强度 (屈服, 23°C)	120 MPa	ASTM D790
冲击性能	额定值 单位制	测试方法
无缺口悬臂梁冲击 (6.40 mm)	350 J/m	ASTM D256
硬度	额定值 单位制	测试方法
洛氏硬度 (R 计秤)	96	ASTM D785
热性能	额定值 单位制	测试方法
热变形温度 (1.8 MPa, 未退火)	240 °C	ASTM D648
线形膨胀系数		Internal Method
流动: 150°C	0.000010 cm/cm/°C	
横向: 150°C	0.000062 cm/cm/°C	
电气性能	额定值 单位制	测试方法
体积电阻率	1.0E+15 ohm-cm	ASTM D257
介电常数		ASTM D150
1 MHz	3.80	
1.00 GHz	3.40	

1 / 3

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PRODUCT SPECIFICATION OF OUPIIN

Material Housing :UL

Component - Plastics

E249884

SUMITOMO CHEMICAL CO LTD

ELECTRONIC MATERIALS DIV, TOKYO SUMITOMO TWIN BLDG, 27-1 SHINKAWA 2-CHOME, CHUO-KU TOKYO 104-8260 JP

E6808UHF(i)

Liquid Crystal Polymer (LCP), "SUMIKASUPER", furnished as pellets

Color	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
ALL	0.3	V-0	-	-	130	130	130

Comparative Tracking Index (CTI) :

Inclined Plane Tracking (IPT) :

Dielectric Strength (kV/mm) :

Volume Resistivity (10^2 ohm-cm) :

High-Voltage Arc Tracking Rate (HVTR) :

High Volt, Low Current Arc Resis (D495) :

Dimensional Stability (%) :

(i) - Virgin and regrind up to 50% by weight incl. have the same flammability characteristics. No other properties have been evaluated.

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: 2004-02-11

Last Revised: 2012-04-13

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IEC and ISO Test Methods

Test Name	Test Method	Units	Thickness Tested (mm)	Value
Flammability	IEC 60695-11-10	Class (color)	0.3	V-0 (ALL)
Glow-Wire Flammability (GWFI)	IEC 60695-2-12	C	-	-
Glow-Wire Ignition (GWIT)	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	-	-

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PRODUCT SPECIFICATION OF OUPIN

Material Contact & LEG: Copper Alloy (Phosphor Bronze)

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GUO CHING PRECISION CO., LTD

試驗成績表

REPORT OF MATERIAL TEST

客戶: 歐品電子有限公司	國慶精密股份有限公司
Customer	桃園縣龜山鄉大崗村大湖路2-17號
品名: C5210-SH	尺寸: 0.200x 22.0x C
Product	Size
料號: 1030305007	日期: 103/03/05
Lot No	Date
	TEL: 03-2115391~8
	FAX: 03-2115399

化學成份

CHEMICAL COMPOSITION

元素 ELEMENT	Cu	P	Sn
規範 MAX	99.700	0.350	9.000
SPEC MIN	-	0.030	7.000
分析值 ANALYSIS VALUE	91.857	0.149	7.961

試驗

TEST RESULT

項目 ITEM	抗張 Tensile Strength kgf/mm2	伸長 Elongation %	硬度 Hardness Test o	結晶粒度 Grain Size µm	導電率 Electric Conductivity
規範 CONDITION	-	-	HV	-	-
SPEC MAX	85.000	-	250.000	-	-
MIN	68.000	9.000	230.000	-	-
測驗值 MEASURE-MENT VALUE	77.750	18.580	234.000	0.010	11.200



Approved by:



Checked by:

