



PRODUCT SPECIFICATION OF OUPIIN

PRODUCT SPECIFICATION

(產品規格書)

Ordering information

8949-AC	8	8	-06	B	F	A
Series	8: 8 Position 6: 6 Position 4: 4 Position	8: 8 Contacts 6: 6 Contacts 4: 4 Contacts 2: 2 Contacts	06:06 μ” 15:15 μ” 30:30 μ” 50:50 μ” Gold Plated	B: Black	F: With Flange N: W/O Flange	A: Tray Package

PRODUCT NAME (產品名稱)	DOCUMENT No.: (文件編號)	Rev. (版本)	OUPIIN
Modular Jack AC Type	8949-ACspec	A(I563)	(歐品)
	Approved (核準)	Checked (審核)	Prepared (製作)
	Q.A. Section Chief	Joseph Yen	01.22/2018



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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 Modular Jack , 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 Modular Jack 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)
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.

Products required carrier tape should meet the proper specification per purchase order. Connector container and the packaging specification is shown in package drawing.



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(產品包裝可依客戶指定要求.本產品採用包裝，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 1.5A, rating voltage is 150V DC/AC RMS.

額定電流 1.5A，額定電壓 150V DC/AC RMS。

3.7 STORAGE AND OPERATING TEMPERATURE 儲存與使用溫度

Temperature range: -40°C~+85°C, including terminal temperature rise for rating current.

溫度範圍：-40°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-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 245~255°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245~255°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.)



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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；)



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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)	30 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)	500 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. 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 750 cycles specified at the rate of 25mm/min (重復進行配合產品 750 次插拔.)
5. Thermal shock (熱衝擊)	After testing, no damage, Contact Resistance 50 mΩ max.. Dielectric Strength should be OK, Insulation Resistance should be 500 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 500MΩ 最小;)	Temperature range from -40°C to +85°C .Start from -40°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： -40°C~ +85°C；從 -40°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.)
6. Humidity (恆溫恆濕)	After testing, no damage, Contact Resistance 50 mΩ max.. Dielectric Strength should be OK, Insulation Resistance should be 500 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 500MΩ 最小;)	Temperature :85±2° C 96 hours. (溫度：85±2° C 96 小時) Relative Humidity : 90-95%; (相對濕度：90-95%;) Duration :96 Hours. MIL-STD-202, Method 108,



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	Ω 最大；耐電壓測試 OK, 絕緣阻抗 500M Ω 最小;)	(時間：96 小時；MIL-STD-202，方法 108。)
7. Solder ability (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: 245 \pm 5°C. (最高溫度：245 \pm 5°C.)



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Material Housing : 023-1-PBT (Black)

[SGS Test Report Click here\(如需 SGS 測試報告請點選此處\)](#)

SHINITE®

PBT

ENGINEERING PLASTIC DIVISION

SHINKONG SYNTHETIC FIBERS CORPORATION

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Technical Data

SHINITE®

E202G30BK

FR/GF Grade / 防火 / 玻纖強化級 : DE3886

		Unit	Test Method	Values
Mechanical properties		機械性質		
Izod Impact(Notched)	衝擊強度	Kg-cm/cm	ASTM D256	8.4
Tensile Strength	拉伸強度	Kg/cm ²	ASTM D638	1200
Elongation	拉伸率	%	ASTM D638	2.8
Flexural Strength	彎曲強度	Kg/cm ²	ASTM D790	1810
Flexural Modulus	彎曲模數	Kg/cm ²	ASTM D790	88000
Rockwell Hardness	洛式硬度	R	ASTM D785	120
Thermal properties		熱性質		
Heat Deflection Temperatu	熱變形溫度		ASTM D648	
66psi		°C		-
264psi		°C		205
Flammability	防火性	-	UL94	V0
Melting Point	熔點	°C	DSC	223
Electrical properties		電氣性質		
Dielectric Strength	介電強度	KV/MM	ASTM D149	20
Dielectric Constant	介電常數	...	ASTM D150	4
Volume Resistivity	體積電阻	Ω-CM	ASTM D257	1.00E+16
Other properties		其它性質		
Specific Gravity	比重	-	ASTM D792	1.60
Water Absorption	吸水率	%	ASTM D570	0.07
Mold Shrinkage	成形收縮率		ASTM D955	
Flow	流動方向	%		0.2~0.4
Cross Flow	垂直方向	%		0.5~0.9

UL file number : E107536

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Material Housing :UL

Component- Plastics

E107536

SHINKONG SYNTHETIC FIBERS CORP

223 YEN PING RD SEC 3, PIN CHENG TAOYUAN HSIEN 324 TW

E202G30

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

Color	Min Thk (mm)	Flame Class	HWM		RTI Elec	RTI Imp	RTI Str
			HWM	HAI			
BK	0.38	V-0	-	-	75	75	75
ALL	0.75	V-0	3	0	130	110	120
	1.5	V-0, 5VB	2	0	130	110	120
BK	1.5	V-0, 5VA	2	0	130	110	120
ALL	3.0	V-0, 5VA	2	0	130	120	130

Comparative Tracking Index (CTI): **2**

Inclined Plane Tracking (IPT): -

Dielectric Strength (kV/mm): **33**

Volume Resistivity (10^8 ohm-cm) : **16**

High-Voltage Arc Tracking Rate (HVTR): **4**

High Volt, Low Current Arc Resis (D495): **6**

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: 2000-06-24

Last Revised: 2012-11-07

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IEC and ISO Test Methods

Test Name	Test Method	Units	Thickness	
			Tested (mm)	Value
Flammability	IEC 60695-11-10, IEC 60695-11-20	Class (color)	0.38	V-0 (BK)
			0.75	V-0 (ALL)
			1.5	V-0, 5VB (ALL)
			1.5	V-0, 5VA (BK)
			3.0	V-0, 5VA (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	3.0	200
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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Material Terminal : Copper Alloy (Phosphor Bronze C5210)

[SGS Test Report Click here](#)

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REPORT OF MATERIAL TEST 材料測試報告

ISO 9001
ISO/TS 16949
IECQ QC080000
ISO 14001
OHSAS 18001 & TOSHMS

No.: 251197

DATE: MAY.21,2013

Customer 顧客名稱 : 名佳利金屬工業股份有限公司
Commodity 商品名稱 : C5210R PHOSPHOR BRONZE FOR SPRING (EH)
Applied Standard 引用標準 : CNS 9503 Phosphor Bronze Sheets, Plates and Strips

Manufacture No.	銅捲號	24H007A
(Specification)	產品規格	Standard
Thickness (mm)	產品厚度	0.300
Width (mm)	產品寬度	622.000
Length (mm)	產品長度	
(Chemical Analysis Test)	化性測試	
P(%)	磷	0.030 - 0.350 0.128
Sn(%)	錫	7.000 - 9.000 7.938
Cu+Sn+P(%)	銅錫磷	min. 99.700 99.942
(Mechanical & Physical Test)	物性測試	
Thickness Test (mm)	厚度測試	- 0.292
Width Test (mm)	寬度測試	-0.10 +0.00 GOOD
Tensile Strength (kgf/mm2)	抗拉強度	min. 65.00 72.26
Elongation (%)	伸長率	min. 10.00 23.54
Hardness Test (Hv)	硬度	200.0 - 230.0 224.0 - 226.0
Grain Size (mm)	結晶粒度	- 0.010
Electric Conductivity (%)	導電率	- 12.10
(Other Information)	其他資訊	
Delivery No.	出貨單號	



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