

# PRODUCT SPECIFICATION

(產品規格書)

產品名稱 Description	產品料號 Part No.	圖號 Drawing No.
4973 Series Female Terminal	4973-PIN-F-5K-TX	4973P02001

PRODUCT NAME	DOCUMENT No.:	<b>Rev.</b>	OUPIIN
(產品名稱)	(文件編號)	(版本)	
	4973spec	B(I667)	(歐品)
4973 Series	<b>Approved</b>	Checked	Prepared
	(核準)	(審核)	(製作)
Female Terminal	Q.A. Section Chief	Allen Chiu	10.04/2018



# 1. SCOPE (範圍)

This product specification defines the product performance and the test methods to ascertain the performance of the , **4973 Series Female Terminal** ,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 4973 Series Female Terminal 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.

(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 3.0 A, rating voltage is 250V DC/AC RMS.

額定電流 3.0 A,額定電壓 250V DC/AC RMS。

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

Temperature range: -40°C~+105°C, including terminal temperature rise for rating current.

溫度範圍:-40°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 (可焊件)

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)

#### WAVE SOLDERING (波峰接)

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℃ /秒,)

#### 2. Soldering (焊接)

Maximum allowable time wave soldering temperature of  $150^{\circ}$ C is  $90\sim120$  seconds. Temperature in this interval is  $235^{\circ}$ C, not to exceed 5 seconds.

(波峰焊溫度150℃時最長不超過90~120秒. 最高溫度235℃時間不超過5秒.)

#### 3. Cool Down (冷卻)

Cool down shall not exceed 5°C per second.

(冷卻速度不超過5℃/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 shall be conforming to the	Visually, dimensions and functionally inspected pe
Product	requirements of applicable product	applicable product drawing.
(產品確認)	drawing.	依相關產品圖面,檢查產品的外觀、尺寸及功能。
	產品必須符合相關產品圖面的要求。	
2. Contact	10 m Ω Max. initial	Subject mated contacts assembled in housing to
Resistance	(最大.初態)	closed circuit of 100 mA max. at open circuit
(接觸阻抗)		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	1000 MΩ Min.	Measure by applying test potential between the
Resistance	(最小)	adjacent contacts, and between the contacts and
(絕緣阻抗)		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	Connector must withstand test	Measure by applying test potential between the
Strength	potential of 1500 V AC for 1 minute.	adjacent contacts, and between the contacts and
(耐電壓)	Current leakage must be 0.5 mA max.	ground in the mated connector. MIL-STD-202,
	(樣品必須承受測試電壓 1500V AC,時	Method 301.
	間一分鐘,漏電流不大於 0.5 mA.)	(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。)
	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(測試產品端子間以及端子與接地間的電



Material Contact : Copper Alloy (Brass C2680)

# SGS Test Report Click here

如需 SGS 測試報告請點選此處



#### REPORT OF MATERIAL TEST 材料測試報告

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

DATE: DEC.26,2014

No.: 3C1556

Customer 顧客名稱: 歐品電子有限公司 Commodity 商品名稱: C 2680 R BRASS STRIP ( H ) Applied Standard 引用標準: JIS H 3100 Copper and Copper alloy sheets, plates and strips

Manufacture No.	銀計卷隻以沈		3AA046A	•
(Specification) Thickness (mm) Width (mm) Length (mm)	産品規格 産品厚度 産品寛度 産品良度	Standard	0.400 27.500	
(Chemical Analysis Test) Cu(%) Fe(%) Pb(%) Zn(%)	化性测試 銅 鐵 鉛 鈴	64.000-68.000 max. 0.050 max. 0.0500 REM.	64.947 0.013 0.0003 REM.	
(Mechanical & Physical Test) Thickness Test (mm) Width Test (mm) Tensile Strength (kgf/mm2) Elongation (%) Hardness Test (Hv) Grain Size (mm) Electric Conductivity (%)	物性測試 厚度測試 寬度測試 抗拉強度 仲長度 健度 結晶粒度 導電率	-0.015 +0.010 -0.10 +0.00 42.00 - 55.00 - 140.0 - 160.0	0.394 COOD 51.06 17.92 158.0 - 160.0 0.015 26.20	
(Other Information) Delivery No. Customer Purchase Order	其他資訊 出貨單號 採購單號	•	3CA079 P0.B02A14101603	



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