



## 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.
Housing 2.54mm Terminal	4071-xxHNB	4071D02001
	4071-PIN-T-10K	

PRODUCT NAME (產品名稱)	DOCUMENT No.: (文件編號)	Rev. (版本)	OUPIIN
Housing 2.54mm Terminal	4071spec	B(I704)	(歐品)
	Approved (核準)	Checked (審核)	Prepared (製作)
	Q.A. Section Chief	Allen Chiu	08.31/2018



# 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 Housing 2.54 mm & 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 Housing 2.54 mm & 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。)



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### 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: -25°C~+85°C, including terminal temperature rise for rating current.

溫度範圍：-25°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)

#### 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°C /秒,)

#### 2. Soldering (焊接)

Maximum allowable time wave soldering temperature of 150°C is 90~120 seconds. Temperature in this interval is 235°C, not to exceed 5 seconds.

(波峰焊溫度150°C時最長不超過90~120秒。最高溫度235°C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°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。)



## **PRODUCT SPECIFICATION OF OUPIIN**

### **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；)



## **PRODUCT SPECIFICATION OF OUPIIN**

**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. (產品必須符合相關產品圖面的要求。)	Visually, dimensions and functionally inspected per applicable product drawing. (依相關產品圖面，檢查產品的外觀、尺寸及功能。)
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 1500 V AC for 1 minute. Current leakage must be 0.5 mA max. (樣品必須承受測試電壓 1500V 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。)



## PRODUCT SPECIFICATION OF OUPIIN

Material Housing : 016-PA66 (UL94V-2)

[SGS Test Report Click here](#)

[如需 SGS 測試報告請點選此處](#)

TL/0124/1997.289/UK

### TECHNYL® A 205F

<b>Description</b>	Unreinforced polyamide 66 , high fluidity , fast cycling grade, for injection moulding .									
<b>Applications</b>	<p>TECHNYL A 205F offers two main advantages : excellent filling qualities and UL 94 V2 under 0.4 mm.</p> <p>It is particularly suitable for the moulding of long parts with thin wall sections, such as :</p> <ul style="list-style-type: none"><li>- cable ties and fasteners,</li><li>- connectors.</li></ul> <p>This product is available in natural, black and in colours on request .</p>									
<b>Processing</b>	<p>The material is supplied in airtight bags, ready for use . In the case that the virgin material has absorbed moisture, it must be dried to a final moisture content of less than 0,2% with a dehumidified air drying equipment at approx 80°C.</p> <p>Recommended moulding conditions :</p> <table><tr><td>Barrel temperatures :</td><td>- feed zone</td><td>270 - 275°C</td></tr><tr><td></td><td>- compression zone</td><td>280 - 285°C</td></tr><tr><td></td><td>- front zone</td><td>285 - 290°C</td></tr></table> <p>Mould temperatures : 60 at 80°C</p> <p>For more detailed information , please refer to the technical sheet "Injection moulding".</p>	Barrel temperatures :	- feed zone	270 - 275°C		- compression zone	280 - 285°C		- front zone	285 - 290°C
Barrel temperatures :	- feed zone	270 - 275°C								
	- compression zone	280 - 285°C								
	- front zone	285 - 290°C								
<b>Safety</b>	Please refer to the Material Safety Data Sheet A1									

Engineering Plastics



# PRODUCT SPECIFICATION OF OUPIIN

## TECHNYL® A 205F

### Main properties

Values measured at 23 °C

The values of properties are for natural grade.

Properties	Standards	Unit	Values	
			EH 0 – 23 °C	EH 50 – 23 °C
<b>Physical</b>				
Water absorption, 24h in water at 23°C	ISO 62	%	1.2	-
Density	ISO 1183-A	g/cm <sup>3</sup>	1.14	-
Moulding shrinkage longitudinal	RHODIA-EP	%	1.9	-
Moulding shrinkage transverse	RHODIA-EP	%	1.9	-
<b>Mechanical</b>				
Tensile Modulus	ISO 527	MPa	3200	1600
Yield stress	ISO 527	MPa	85	50
Elongation at yield	ISO 527	%	4	10
Nominal elongation at break	ISO 527	%	25	200
Stress at 50% elongation	ISO 527	MPa	-	50
Tensile stress at break	ISO 527	MPa	60	40
Flexural modulus	ISO 178	MPa	2900	1300
Flexural, maxi. load stress	ISO 178	MPa	120	50
Charpy notched impact strength	ISO 179/1EA-1993	kJ/m <sup>2</sup>	4.5	8
Charpy notched impact strength ISO179/1A	ISO 179-1982	kJ/m <sup>2</sup>	5	15
Charpy impact strength	ISO 179/1EU-1993	kJ/m <sup>2</sup>	NB	NB
Charpy impact strength ISO 179/1D	ISO 179-1982	kJ/m <sup>2</sup>	999	999
Izod notched impact strength	ISO 180	kJ/m <sup>2</sup>	4.5	6
<b>Thermal</b>				
Melt temperature	ISO 3146 - C	°C	263	-
Temper. of dimensional stability 1,8 MPa	ISO 75-2	°C	75	-
Coef. linear expansion longit. 23°C-85°C	ASTM E 831	E-5 / °C	7	-
Flammability UL94 thickness 0,4mm	ISO 1210/UL 94	-	V2	-
Flammability UL94 thickness 0,8mm	ISO 1210/UL 94	-	V2	-
Flammability UL94 thickness 1,6 mm	ISO 1210/UL 94	-	V2	-
Glow wire test thickness 1,6 mm	IEC 695-2-1	°C	850	960
<b>Electrical</b>				
Relative permittivity 1MHz	IEC 250	-	2.9	3.2
Dissipation factor 1 MHz	IEC 250	-	0.03	0.08
Volume resistivity	IEC 93	E14.Ohm.cm	10	0.1
Surface resistivity	IEC 93	E14.Ohm	5	0.1
Dielectric strength	IEC 243-1	kV/mm	27	26
Comparative tracking index KC	IEC 112	Volt	600	600
Comparative tracking index KB	IEC 112	Volt	550	-
<b>Specific</b>				
Limit oxygen index	ISO 4589	%	28.5	-

### Identification code

>PA66<

The information contained in this document is supplied in good faith. It is based on the extent of our knowledge of the products as listed, and on the tests and experiments carried out in our laboratories. It is to be used only as an indication and shall not be construed in any way as a formal commitment or warranty on our part. Compliance of our products with your conditions of application or use can only be determined pursuant to your own prior appropriate test. The listed values of properties are for natural grade, if not otherwise specified.



Engineering Plastics

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# PRODUCT SPECIFICATION OF OUPIIN

## Material Housing :UL

UL Certification

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[iq.ul.com](http://iq.ul.com)

**Component - Plastics** [guide info]

**E44716**

**SOLVAY ENGINEERING PLASTICS GBU**

QUARTIER BELLE-ETOILE, AVE RAMBOZ, BOITE POSTALE 64, ST FON S CEDEX 69192 FR

### A205F nat S(r4)

Polyamide 66 (PA66), unfilled, "Technyl Star", furnished as pellets

	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
Color							
ALL	0.38	V-2	4	0	105	65	65
	0.75	V-2	4	0	110	75	85
	1.5	V-2	3	0	115	75	85
	3.0	V-2	2	0	120	75	85

Comparative Tracking Index (CTI): 0

Inclined Plane Tracking (IPT): -

Dielectric Strength (kV/mm): -

Volume Resistivity (10<sup>11</sup> ohm-cm): -

High-Voltage Arc Tracking Rate (HVTR): 0

High Volt, Low Current Arc Resis  
(D495): 5

Dimensional Stability (%): -

(r4) - Virgin and regrind up to 50% by weight inclusive have the same basic material characteristics with respect to flammability, HDT, and RTI

NOTE - Materials designated "Technyl" may be prefixed by the letters "TY".

ANSUL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSVUL 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: 1992-09-17

Last Revised: 2013-07-10

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### IEC and ISO Test Methods

Test Name	Test Method	Units	Thk (mm)	Value
Flammability	IEC 60695-11-10	Class (color)	0.38	V-2 (ALL)
			0.75	V-2 (ALL)
			1.5	V-2 (ALL)
			3.0	V-2 (ALL)
Glow-Wire Flammability (GWF1)	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 <sup>2</sup>	-	-
ISO Izod Impact	ISO 180	kJ/m <sup>2</sup>	-	-
ISO Charpy Impact	ISO 179-2	kJ/m <sup>2</sup>	-	-





# PRODUCT SPECIFICATION OF OUPIIN

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

No. : 3C1556

DATE: DEC.26,2014

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.	鑄造號	3AA046A	
(Specification)	產品規格	Standard	
Thickness (mm)	產品厚度	0.400	
Width (mm)	產品寬度	27.500	
Length (mm)	產品長度		
(Chemical Analysis Test)	化性測試		
Cu(%)	銅	64.000-68.000	64.947
Fe(%)	鐵	max. 0.050	0.013
Pb(%)	鉛	max. 0.0500	0.0003
Zn(%)	鋅	REM.	REM.
(Mechanical & Physical Test)	物性測試		
Thickness Test (mm)	厚度測試	-0.015 +0.010	0.394
Width Test (mm)	寬度測試	-0.10 +0.00	GOOD
Tensile Strength (kgf/mm <sup>2</sup> )	抗拉強度	42.00 - 55.00	51.06
Elongation (%)	伸長率	-	17.92
Hardness Test (Hv)	硬度	140.0 - 160.0	158.0 - 160.0
Grain Size (mm)	結晶粒度	-	0.015
Electric Conductivity (%)	導電率	-	26.20
(Other Information)	其他資訊		
Delivery No.	出貨單號	3CA079	
Customer Purchase Order	採購單號	PO.B02A14101603	



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A980301 G3A00203AH

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