PRODUCT SPECIFICATION

(產品規格書)

Ordering information

8930-	F	085120	G	BA	xx	S	B
Series	Pitch F:5.0 mm	Manufacturing Code	G:Green B:Black Y:Gray U:Blue	BA:Close Type BB:Open Type	No. of Positions 02~24	S: Straight	B: Bulk Package for 2~4 Pos. B: Box Package for 5~24 Pos.
8930-	F	085120	G	BA	xx	R	B
Series	Pitch F:5.0 mm	Manufacturing Code	G:Green B:Black Y:Gray U:Blue	BA:Close Type BB:Open Type	No. of Positions 02~24	R:Right Angle	B: Bulk Package for 2~5 Pos. B: Box Package for 6~24 Pos.

A1:OCT.23/2012(新增)

PRODUCT NAME (產品名稱)	**DOCUMENT No.:** (文件編號)	**Rev.** (版本)	**OUPIIN** (歐品)
Terminal Block Pitch 5.0mm (RoHS)	8930spec-F085-S&R S:8930D01004-A3 R:8930D01005-A4	A1	
	Approved (核準)	**Checked** (審核)	**Prepared** (製作)
	Q.A. Section Chief	Amy Chiu	OCT.23/2012

1. SCOPE （範圍）

This product specification defines the product performance and the test methods to ascertain the performance of the Terminal Block Pitch 5.0mm , 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 Terminal Block Pitch 5.0mm 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）

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 Bulk Package/ Box Package 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 20 A, rating voltage is 300V DC/AC RMS.
額定電流 20 A，額定電壓 300V DC/AC RMS。

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

Temperature range: -40°C~+115°C, including terminal temperature rise for rating current.
溫度範圍：-40°C~+115°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 220~245°C for products with lead, or 235~250°C for lead-free products. The tin dip time is duration for 3~5 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220~245°C，無鉛產品控制在235~250°C。浸錫時間控制在3~5秒。)

3. Cool Down （冷卻）

Cool down shall not exceed 5℃ 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 (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. Dielectric Strength (耐電壓)	Connector must withstand test potential of 1600 V AC for 1 minute. Current leakage must be 10 mA max. (樣品必須承受測試電壓 1600V AC，時間一分鐘，漏電流不大於 10 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。)
3. Soldering Test. (可焊性試驗)	A new uniform coating of solder shall cover a minimum of 85 of the surface being immerasd. 浸入的部份 85%以上表面將被錫覆蓋	The tip of the terminals shall be dipped 2mm in the solder bath at a temperature of 250±5°C for 5 ±0.5sec. 端子頂部被浸入焊錫池 2mm 深,溫度 250±5°C 時間 5 ±0.5 秒

Material Housing：893x-PA66G(Green)

SGS Test Report Click here

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Technical data sheet

AWT 8/96 001/003

FRISETTA POLYMER

FRIANYL A63 RV0

Nylon 6.6 for injection moulding, flame retardant, free of halogen and phosphorus (rated UL 94 V0).

	Testing Standard	Unit	Values
Product Features			
Abbreviation	ISO 1043	--	----
Density	ISO 1183	g/cm^3	1,15
Viscosity index	ISO 307	ml/g	145
Water absorption at saturation (+23 °C)	ISO 62	%	8-9
Water absorption (+23 °C)	ISO 62	%	2,2-3,0
Shrinkage longitudinal	ISO 294-4 **	%	1,4-1,7
Shrinkage transvers	ISO 294-4 **	%	1,2-1,4
Material Constants for Flammability			
Flammability	UL-94	HB-V0	V0
Automobile interior fittings: thickness =1mm	FMVSS 302	----	----
Glow Wire GWFI	DIN EN 60695-2-12	----	960
Glow Wire GWIT	DIN EN 60695-2-13	----	775
Mechanical features			
Tensile modulus	ISO 527	N/mm^2	3600
Tensile strength	ISO 527	N/mm^2	85
Tensile elongation at break	ISO 527	%	12
Flexural strength	ISO 178	N/mm^2	----
Charpy impact (+23 °C)	ISO 179/1eU	kJ/m^2	NB
Charpy impact (-30 °C)	ISO 179/1eU	kJ/m^2	NB
Charpy impact, notched (+23 °C)	ISO 179/1eA	kJ/m^2	4
Charpy impact, notched (-30 °C)	ISO 179/1eA	kJ/m^2	3
Surface hardness	ISO 2039-1	N/mm^2	130
Thermal features			
Melting point	ISO 3146 DSC	°C	256
Distorsion temp. under load (Meth. A)	ISO 75	°C	85
Distorsion temp. under load (Meth. B)	ISO 75	°C	185
Temp. index applied to 50% falling of tensile strength after 20 000h	IEC 216-1	°C	130
Electrical features			
Volume resistivity	IEC 60093	OHM cm	1 E 15
Surface resistivity	IEC 60093	OHM	----
Dissipation factor (1MHz)	IEC 250	----	0,02
Comparative figure of tracking CTI 50 drops	IEC 60112	----	----
Tracking index (CTI 100)	IEC 112	----	600
Comparative figure of tracking CTI-M 50 drops	IEC 60112	----	----
Tracking index (CTI-M 100)	IEC 112	----	600

* All values freshly molded, for variations please look in the product description

** Plate 60x60x2mm

Our publications, leaflets and technical data are for information and advice. Therefore no obligation can be derived from it. Please adapt the processing and application of the products to the prevailing conditions.
Revision : 22.11.2002

Material Housing :UL

UL iQ™ for Plastics

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Component - Plastics E86034

NILIT PLASTICS EUROPE GMBH & CO KG

NIEDERMATT 11, UTZENFELD 79694 DE

A 63 V0

Polyamide 66 (PA66), "FRIANYL", furnished as granular material

Color	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
ALL	0.38	V-0	4	0	125	90	115
	0.75	V-0	4	0	125	95	115
	1.5	V-0	2	0	125	95	120
	3.0	V-0	1	0	125	95	120

Comparative Tracking Index (CTI): 0 Dimensional Stability (%): -

High-Voltage Arc Tracking Rate (HVTR): - High Volt, Low Current Arc Resis (D495): -

Dielectric Strength (kV/mm): - Volume Resistivity (10^x ohm-cm): -

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: 1992-10-22

Last Revised: 2004-06-11 Underwriters Laboratories Inc®

IEC and ISO Test Methods

Test Name	Test Method	Units	Thickness Tested (mm)	Value
Flammability	IEC 60695-11-10	Class (color)	0.38	V-0 (ALL)
			0.75	V-0 (ALL)
			1.5	V-0 (ALL)
			3.0	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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The materials covered in this database are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. THE FINAL ACCEPTANCE OF THE COMPONENT IS DEPENDENT UPON ITS INSTALLATION AND USE IN COMPLETE PRODUCTS SUBMITTED TO UNDERWRITERS LABORATORIES INC.

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Material Contact Pin: Copper Alloy (Brass:C1100)

SGS Test Report Click here

如需 SGS 測試報告請點選此處

REPORT OF MATERIAL TEST

Commodity: Tough Pitch Copper C1100 R 品名 高导电铜	State: H 状态 硬
Excutive Standard: JIS H 3100 Tough-Pitch Copper Sheets, Plates and Strips 执行标准	

Chemical Analysis Test

Work No 产品编号	Size of Product 产品规格 厚度 Thickness (mm)	宽度 Width (mm)	长度 Length (mm)	Cu(%)			
	Standard			Min. 99.90			
20P625H	0.8	29	----------	≥99.90			

Mechanical & Physical Test

Work No 产品编号	产品规格 Size of Product 厚度 Thickness (mm)	宽度 Width (mm)	长度 Length (mm)	尺寸检测 Dimension Test 厚度 Thickness (mm)	宽度 Width (mm)	张力测试 Tension Test 抗拉强度 TensileStrength (kgf/m m²)	伸长率 Elongatin (%)	硬度 HardnessTest HV	结晶粒度 Grain Size (mm)	导电率 Electric 20℃ Conductity (%)
	标准 Standard			±0.02	+0 -0.1	30 以上	Min. 5 以上	100—130	0.02	96
20P625H	0.8	29	---	0.78	28.94	35.6	6.2	107	0.02 以上	97 以上

深圳市正泽祥金属供应链服务有限公司

制 表 ：魏祥波　　2009 年 8 月 12 日