PRODUCT SPECIFICATION

(產品規格書)

Ordering information

4573-	15	MT	S	B
Series	No. of Pin Count 02~15	MT: Matte Tin Plated	S:Straight R:Right Angle	B：Bulk Package

B1:SEP.04/2012.
B2:MAY.30/2013(產品轉無鹵變更塑料)
B3:JUN.13/2013(無鹵產品變更料號)

PRODUCT NAME (產品名稱)	**DOCUMENT No.:** (文件編號)	**Rev.** (版本)	**OUPIIN** (歐品)
Wafer 1.25mm	4573spec-W	B3	
Dip Type	**Approved** (核準)	**Checked** (審核)	**Prepared** (製作)
(RoHS)	Q.A. Section Chief	Amy Chiu	JUN.13/2013

1. SCOPE （範圍）

This product specification defines the product performance and the test methods to ascertain the performance of the Wafer 1.25mm Dip 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 Wafer 1.25mm Dip 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-202F	Test method for electrical components (電子零件測試方法）
EIA364	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 1.0A, rating voltage is 125V DC/AC RMS.
額定電流 1.0A，額定電壓 125V DC/AC RMS。

3.7 OPERATING TEMPERATURE *使用溫度*

Temperature range: -25°C~+85°C.
溫度範圍：-25°C~+85°C。

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 6℃ per second.
(冷卻速度不超過6℃/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爲準.)

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)	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)	100 MΩ Min. (最小)	Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector. (測試產品端子間以及端子與接地間的電阻) (250V 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. Thermal shock (熱衝擊)	After testing, no damage, Contact Resistance 30 mΩ max.. Dielectric Strength should be OK, Insulation Resistance should be 100 MΩ min. (測試後,產品無損壞，接觸阻抗：30 mΩ最大；耐電壓測試 OK, 絕緣阻抗 100MΩ最小;)	Temperature range from -25°C to +85°C .Start from -25°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： -25°C ~ +85°C；從 -25°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. 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，在放大倍數爲 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±5°C. (最高溫度：245±5°C.)

Material Housing : I704-PA6T(FR52G30NH)

SGS Test Report Click here

如需 SGS 測試報告請點選此處

Product Information

DuPont™ Zytel® HTN

high performance polyamide resin

PRELIMINARY DATA

Zytel® HTNFR52G30NH NC010

Zytel® HTNFR52G30NH NC010 is a 30% glass reinforced, flame retardant, lubricated high performance polyamide resin. It is also a PPA resin and is halogen-free.

Property	Test Method	Units	Value DAM
Identification			
Part Marking Code	ISO 11469		>PA6 I/66-GF30FR(40)<
Part Marking Code	SAE J1344		>PPA-GF30FR<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	150 (22)
Strain at Break	ISO 527	%	2.2
Tensile Modulus	ISO 527	MPa (kpsi)	10500 (1520)
Flexural Modulus	ISO 178	MPa (kpsi)	9000 (1300)
Flexural Strength	ISO 178	MPa (kpsi)	230 (35)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m²	8
Thermal			
Deflection Temperature 1.80MPa	ISO 75-1/-2	°C (°F)	282 (540)
Melting Temperature 10°C/min, First Heat	ISO 11357-1/-3	°C (°F)	310 (590)

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.
ISO Mechanical properties measured at 4.0 mm, ISO Electrical properties measured at 2.0 mm, and all ASTM properties measured at 3.2 mm.
Test temperature are 23 °C unless otherwise stated.

During molding, use proper protective equipment and adequate ventilation. Avoid exposure to fumes and limit the hold up time and temperature of the resin in the machine. Purge degraded resin carefully with HDPE.

The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

060725/060725

plastics.dupont.com

The miracles of science

Product Information

Zytel® HTNFR52G30NH NC010

Property	Test Method	Units	Value DAM
Electrical			
Surface Resistivity	IEC 60093	ohm	>1E15
Volume Resistivity	IEC 60093	ohm m	>1E13
Electric Strength	IEC 60243-1	kV/mm (V/mil)	
2.0mm			26.0 (655)
Dielectric Constant	ASTM D 2520 B		
1 GHz			3.7
10 GHz			3.8
Dissipation Factor	ASTM D 2520 B	E-4	
1 GHz			110
10 GHz			100
CTI	IEC 60112	V	600
Flammability			
Flammability Classification	UL94		
0.4mm			V-0
Oxygen Index	ISO 4589-1/-2	%	37
Glow Wire Flammability Index	IEC 60695-2-12	°C	
0.75mm			960
Glow Wire Ignition Temperature	IEC 60695-2-13	°C	
0.75mm			725
Other			
Density	ISO 1183	kg/m³ (g/cm³)	1440 (1.44)
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			1.0
Parallel, 2.0mm			0.3

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.
ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.
Test temperature are 23 °C unless otherwise stated.

The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

060725.0 60725

Material Housing :UL

Component - Plastics E41938

E I DUPONT DE NEMOURS & CO INC

ENGINEERING POLYMERS, CHESTNUT RUN PLAZA, PO BOX 80713, WILMINGTON DE 19880

HTNFR52G30NH(r6)

Polyamide 6T/66 (PA6T/66), "Zytel", furnished as pellets

Color	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
ALL	0.40	V-0	-	0	140	-	-
	0.75	V-0	0	0	140	115	125
	1.5	V-0	0	0	140	115	125
	3.0	V-0	0	0	140	120	130

Comparative Tracking Index (CTI): 0

High-Voltage Arc Tracking Rate (HVTR): 0

Dielectric Strength (kV/mm): -

Dimensional Stability (%): -

High Volt, Low Current Arc Resis (D495): 4

Volume Resistivity (10^X ohm-cm): -

(r6) - Virgin and regrind up to 50% by weight inclusive have the same flammability characteristics in the natural and black colors only.

NOTE - (1) Material designations that are color pigmented may be followed by suffix letters and numbers. (2) Material designations may be prefixed by "ZYT" or "MIN" or "ZEN" or "DEL" or "CRA" or "RYN".

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: 1996-08-22
Last Revised: 2008-08-11

Underwriters Laboratories Inc®

IEC and ISO Test Methods

Test Name	Test Method	Units	Thickness Tested (mm)	Value
Flammability	IEC 60695-11-10	Class (color)	0.40	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	0.40	960
			0.75	960
			1.5	960
			3.0	960
Glow-Wire Ignition (GWIT)	IEC 60695-2-13	C	0.40	700
			0.75	725
			1.5	725
			3.0	775
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	-	-

Underwriters Laboratories Inc®

Material Contact : Copper Alloy (Brass)

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REPORT OF MATERIAL TEST

MINCHALI

DATE: NOV.27,2008

Customer: 亞松貿易有限公司 | Commodity: C 2680 R BRASS STRIP (H)

Applied Standard: CNS 4383 Brass Sheets,Plates and Strips

ISO 9002:4M8Y035-00 台正字第 3544 號

Chemical Analysis Test

Work No.	Size of Product Thickness (mm)	Width (mm)	Length (mm)	Cu(%)	Fe(%)	Pb(%)	Zn(%)			
	Standard			64.00 - 68.00	max. 0.050	max. 0.014	REM.			
7BA014B	0.300	623.000		65.197	0.018	0.003	REM.			

Mechanical & Physical Test

Work No.	Size of Product Thickness (mm)	Width (mm)	Length (mm)	Dimension Test Thickness (mm)	Width (mm)	Tension Test Tensile Strength (kgf/mm²)	Elongation (%)	Hardness Test HV	Grain Size (mm)	Electric Conductirity (%)
	Standard			-	(-) 0.10 - (+) 0.00	42 - 55	-	105 - 175	-	-
7BA014B	0.300	623.000		GOOD.	GOOD.	49.06	20.78	153.0 - 154.0	0.015	26.1

QC Supervisor

A001005

MINCHALI METAL INDUSTRY CO., LTD.
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