



PRODUCT SPECIFICATION

(產品規格書)

產品名稱 Description	產品料號 Part No.	圖號 Drawing No.
8949-H4D Series Top Entry SMD Type	8949-H4D6x-06BNT-P	8949D02138
	8949-H4Dxx-06BNA-P	8949D02058

PRODUCT NAME (產品名稱)	DOCUMENT No.: (文件編號)	Rev. (版本)	OUPIIN
8949-H4D Series Top Entry SMD Type (RoHS)	Q8949-PSS-I009	C (I563)	(歐品)
	Approved (核准)	Checked (審核)	Prepared (製作)
	Q.A. Section Chief	Ruru Chen	2023.03.01



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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 8949-H4D Series Top Entry SMD Type, which is designed and manufactured by Oupiin Electronic Co.,Ltd. This product specification is applicable but not only for those part numbers which be shown in the cover page.

本產品規格書規定了由歐品電子有限公司生產的 8949-H4D Series Top Entry SMD Type 型連接器，產品的特性及測試方法。本產品規格書適用於但不局限於封面所顯示的產品料號

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-C-39012C	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 1.5A, rating voltage is 150V AC

額定電流 1.5A，額定電壓 150V AC

3.7. OPERATING TEMPERATURE 使用溫度

Operating temperature : -40°C ~+85°C

使用溫度範圍：-40°C ~+85°C

4. Environmental 環境要求

4.1. SOLDERABILITY 可焊性

Connectors meet solder-ability to EIA-364-52, and shall be free of contaminants.

產品可焊性符合EIA-364-52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

4.2.1. INFRARED REFLOW 紅外線回流焊接

Each cycle consists of three consecutive phases. as shown in **Table II**.

每個焊接週期包括三個連續的階段，見附表二

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.

除非特別註明，所有測試在室溫條件下完成



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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 10 cycles 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

附表一：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. 30mΩ max final. 初始狀態最大 20 mΩ 最終狀態最大 30 mΩ	Subject mated contacts assembled in housing to open circuit of 100 mA max, 20 mV max. 所述固定在外殼裡的端子連結到一個開路中測試：電流 100 mA，電壓 20 mV max. EIA-364-23B
3. Insulation Resistance 絕緣阻抗	500 MΩ Min. initial 200 MΩ Min. Final. 初始狀態最小 500 MΩ 最終狀態最小 200 MΩ	Test between adjacent contacts of unmated connector for 1 minute. 500 V DC±10% 在未配對連接器的相鄰端子之間測試 1 分鐘 500V DC±10% EIA-364-21C
4. Dielectric Withstanding Strength 耐電壓	No creeping discharge or flashover shall occur. Current leakage must be 0.5 mA max. 不得發生放電或閃絡，漏電流不大於 0.5 mA.	Test between adjacent circuits of unmated connector. 1KVrms at 60Hz, 1 minute between adjacent contacts. 1.5KVrms at 60Hz, 1 minute between shield and contacts. 連接器的相鄰電路之間必須承受測試 1KVrms at 60Hz，時間一分鐘 連接器的外殼與端子之間必須承受測試 1.5KVrms at 60Hz，時間一分鐘。 EIA-364-20B
5. Durability 耐久性	After testing, no physical damage. 測試後，產品外觀無損壞	The sample should be mounted the tester and fully mated and unmated 750 cycles specified at the rate of 25mm/min 重覆進行配合產品 750 次插拔，速度 25 mm/分鐘 EIA-364-09C



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<p>6. Mating Force 插入力</p>	<p>2 contacts -----1.6Kgf Max. 4 contacts -----1.8Kgf Max. 6 contacts -----2.1Kgf Max. 8 contacts -----2.3Kgf Max. 10 contacts -----2.5Kgf Max.</p>	<p>Measure the force required to mate connector. Operation speed : 25 mm/min. 測量以 25mm/分的速度從塑膠本體對插 EIA-364-13B</p>
<p>7. Humidity 恆溫恆濕</p>	<p>After testing, no physical damage. Contact Resistance 30 mΩ Max. 測試後，產品外觀無損壞，接觸阻抗最大30 mΩ</p>	<p>Temperature : 40±2°C 溫度：40±2°C Relative Humidity : 90-95%; 相對濕度：90-95% Duration : 96 Hours. 時間：96 小時 EIA-364-31B</p>
<p>8. Temperature Life 高溫老化</p>	<p>After testing, no physical damage. Contact Resistance 30 mΩ Max. 測試後，產品外觀無損壞，接觸阻抗最大 30 mΩ</p>	<p>Exposing in a heat chamber at a temperature of 65°C±2°C for 96 hours. 產品置於 65±2°C，連續 96 小時 EIA-364-17B</p>
<p>9. Salt Spray 鹽霧</p>	<p>After testing, no detrimental corrosion allowed in contact area and base metal exposed. Contact Resistance 30 mΩ Max. 測試後，接觸區域和裸露的金屬不允許有害腐蝕，接觸阻抗最大 30 mΩ</p>	<p>5±1% salt concentration, 48 hours, 35±2°C. 鹽水濃度 5±1%，時間 48 小時，溫度 35±2°C EIA-364-26B</p>
<p>10. Solder ability 可焊性</p>	<p>The inspected area of each lead must have 95% solder coverage minimum. 浸錫區域必須大於 95%</p>	<p>Soldering time : 5±0.5 Seconds 焊接時間：5±0.5 秒 Soldering Temperature : 245±5°C 焊接溫度：245±5°C JESD22-B102D</p>

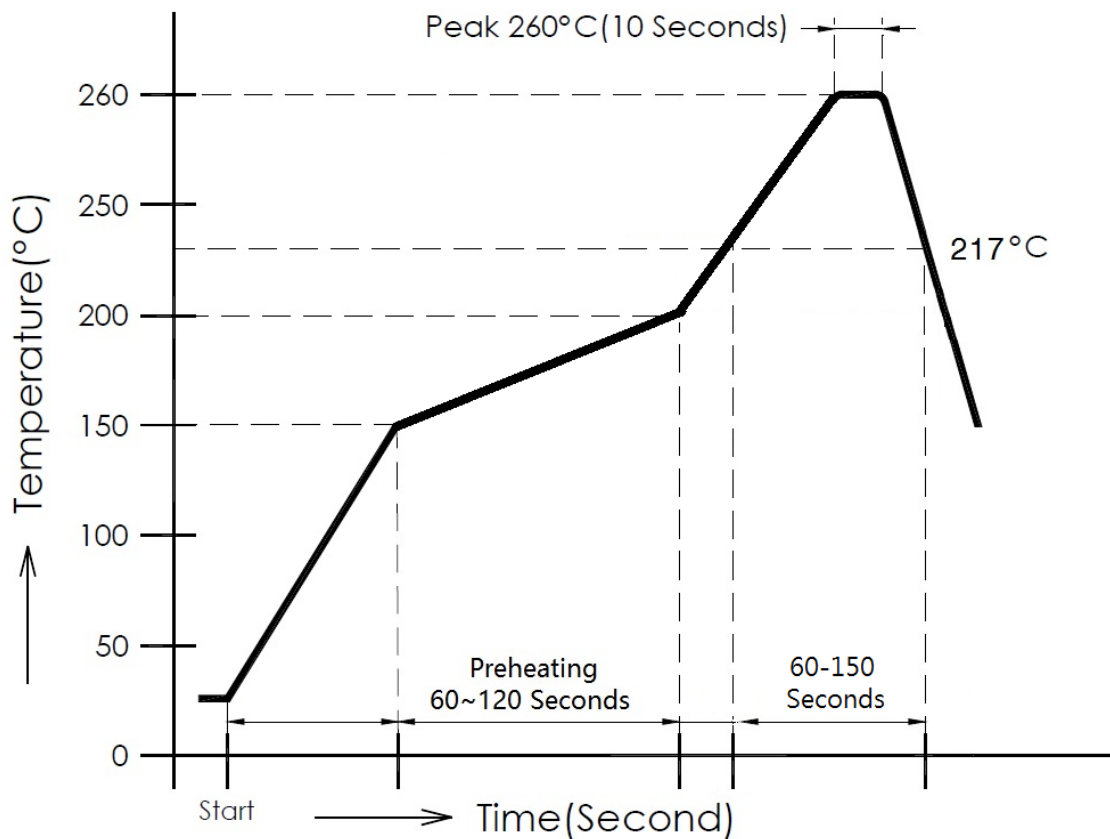


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Table II : Reflow Soldering Profile

附表二：回流焊曲線圖

Parameter 參數	Reference 參考	Specification 規格
Ramp-up (升溫區)	25°C ~150°C	3°C /S Max
Pre-heating (預熱區)	150°C ~200°C	60~120 sec
Time maintained above(保持時間)	217°C	60-150 sec
Peak Temperature	260+0/-5°C	10 sec



This profile is the minimum requirement for evaluating soldering heat resistance of components. Heat transfer method used for reflow soldering is hot air convection. The actual air temperatures used to achieve the specified profile largely dependent on the reflow equipment.

這個曲線圖是評估元件器件焊接抗熱的基本要求，應用在對焊接中的熱傳遞方式是熱氣對流，達到特定曲線圖地實際溫度主要依賴與回流焊接設備。