

PRODUCT SPECIFICATION

(產品規格書)

產品名稱 Description	產品料號 Part No.	圖號 Drawing No.
9391 Series Male Dip Type	9391-A1P02S24P02CB30DA-A037	9391-D0000-339

PRODUCT NAME	DOCUMENT No.:	Rev.	OUPIIN
(產品名稱)	(文件編號)	(版本)	
9391 Series Male	Q9391-PSS-002	R (I800)	(歐品)
Dip Type	Approved	Checked	Prepared
	(核準)	(審核)	(製作)
(RoHS)	(1久平)	(田1久)	(4211)



1. SCOPE (節圍)

This product specification defines the product performance and the test methods to ascertain the performance of the 9391 Series Male Dip 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 9391 Series Male Dip 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-1344 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
EIA364 Test method for electrical components 電子零件測試方法
JIS C 0051 Test method for electrical components 電子零件測試方法

MIL-G-45204C Specification for gold plating 鍍金規格

IEC standard for current carrying capacity tests IEC電流測試標準

QQ-N-290A Specification for nickel plating 鍍鎳規格 MIL-P-81728A Specification for tin/lead plating 鍍錫鉛規格

MIL-T-10727B Specification for tin plating 鍍錫規格

UL 1977 UL standard for safety of attachment plug and receptacle UL安規要求標準

EN/ISO5961 Determination of total lead & cadmium content 總鉛和總鎘含量測定 EN1122 Determination of total lead & cadmium content 總鉛和總鎘含量測定

EN13346 Determination of heavy metals content 重金屬含量測定

EPA3052 Determination of total lead & cadmium content 總鉛和總鎘含量測定

3. FEATURE & DIMENSIONS (特徵及尺寸)

3.1. PRODUCT DIMENSION (產品尺寸)

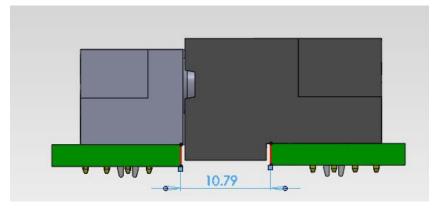
These connectors shall have the dimensions as shown in drawing.

(本產品的相關尺寸參考圖面。)

3.2. MALE AND FEMALE PRODUCT (公母產品裝配)

3.2.1. Male Female assembly dimension 公母產品裝配尺寸

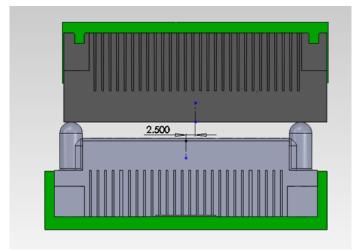




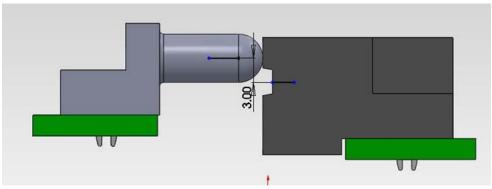
Distance between male's PCB and female's PCB is 10.79REF 公母 PCB 板之間的尺寸為 10.79REF

3.2.2. Perpendicular to engaging direction 垂直插入方向

The design of the centering and guiding in the mpc of the free and fixed board connector modules shall accept a misalignment of 2.50mm in transverse and 3.00mm in longitudinal axes of the connector 固定板連接器模件的 Mpc 裡,連接器設計中心線橫向可接受 2.50mm 和縱向可接受 3.00mm 的偏差。



allowed misalignment in transverse axes 在横向方向允許對插偏差量



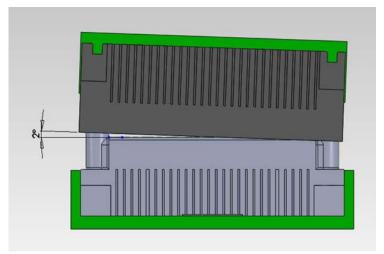
allowed misalignment in longitudinal axes在縱向方向允許對插偏差量



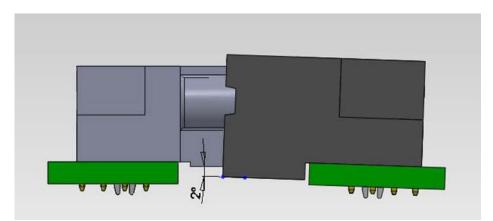
3.2.3. Inclination 傾向

The center and guiding in the Mpc of the free and the fixed board connector modules shall allow an initial angular misalignment of 2° from both the transverse and longitudinal axes.

固定板連接器模件的在 Mpc 裡,連接器可接受橫向和縱向 2°的最大傾斜對插角度。

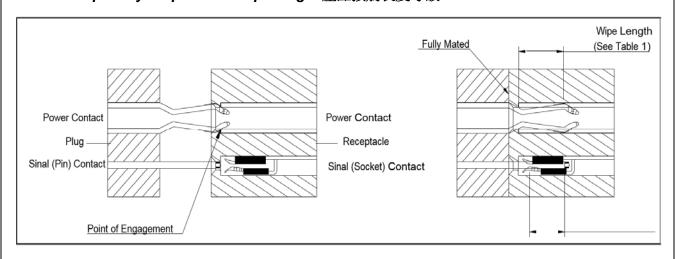


allowed an initial angular misalignment in transverse axes 在横向方向允許的最大傾斜對插角度



allowed an initial angular misalignment in longitudinal axes 在縱向方向允許的最大傾斜對插角度

3.2.4. Capability for products wipe length 產品接觸長度等級





Contact	Mating Level	Wipe Length (min)	DESCRIPTION OF DRAWING		
	1	4.88	FS		
High Power	2	3.61	М		
	2	3.61	NA		
Low Power	3	2.59	NA		
	1	3.47	F		
	2	3.28	G		
Signal	3	2.47	К		
	4	2.01	E		
	5	0.74	Н		

Table 1

3.3. 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 參見圖面。)

3.4. 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。)

3.5. 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。)

3.6. 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。)



3.7. RATING CURRENT AND RATING VOLTAGE (額定電流與額定電壓)

Signal Pin rating current: Signal Pin 2.5A、信號 Pin 額定電流: Signal Pin 2.5A、

Power Pin rating current:

電源 Pin 額定電流:

Typo	Pitch	Single	2 Adjacent	4 Adjacent	12 Adjacent
Туре	(mm)	Contact	Contacts	Contacts	Contacts
	5.08	60A	45A	36A	30A
Power Contact	6.35	60A	45A	38A	30A
	7.62	60A	45A	42A	30A

rating voltage: Signal Pin:50V DC RMS ${\scriptstyle \vee}$ Power Pin:200V DC RMS.

額定電壓: Signal Pin 50V DC RMS、 Power Pin:200V DC RMS.

3.8. STORAGE AND OPERATING TEMPERATURE (儲存與使用溫度)

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

Time limt is 18 months the prodoucts are stored

溫度範圍:-40°C~+105°C,包含接觸端子的額定電流溫升,產品限存時間為 18 個月。

4. PERFORMANCE AND TEST DESCRIPTION (性能及測試)

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. WAVE SOLDER 波峰焊接

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

每個焊接週期包括三個連續的階段,見附表四。

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准。

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。)

5.4. TEST SEQUENCE (測試順序)

Product qualification test sequence as shown in Table II.

(產品品質測試順序見附表三。)



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. Signal Contact Resistance (信號接觸阻抗)	Signal Pin: 15 mΩ Max. Signal Pin:最大 15 mΩ。 Per EIA 364 TP06 適用:EIA 364 TP06	Subject mated contacts assembled in housing to closed circuit of 20mA max, Test Voltage 20 mV DC max. 所述固定在外殼裡的端子連結到一個封閉回路中測試,電流最大 20mA,電壓最大 20mV DC 。
3. Power Contact Resistance (電源接觸阻抗)	Power Pin:0.70 mΩ Max. Power Pin:最大 0.70 mΩ。 Per EIA 364 TP06 適用:EIA 364 TP06	Subject mated contacts assembled in housing to closed circuit of 20 mA max, Test Voltage 20 mV DC max. 所述固定端子連結到一個封閉回路中測試,電流 20 mA max, 電壓最大 20mV DC。
4. Insulation Resistance (絕緣阻抗)	Signal Pin:5000 MΩ Min. Power Pin:20000 MΩ Min. Signal Pin:最小 5000 MΩ。 Power Pin:最小 20000 MΩ。 Per EIA 364 TP21 適用:EIA 364 TP21	a. Test Voltage 500V DC b. Electrification time-2 minutes c. Points of Measurement-Between adjacent Contacts a. 測試電壓 500 V DC b. 電氣化時間-2 分鐘 c. 測量點-相鄰觸點之間
5. Dielectric Withstanding Voltage (耐電壓)	There shall be no evidence of arcover, insulation breakdown, or excessive leakage current (>1 mA) when mated connectors are tested 測試配對連接器時,不應出現電弧過度,絕緣擊穿或過大漏電流(>1mA)的情況。 Per EIA 364 TP20 適用:EIA 364 TP20	Test Specification : a. Test Voltage – 2500V DC (power), 1000V DC (signal) b. Test Duration – 60 seconds. c. Test Condition – (760 Torr – sea level). d. Points of measurement Between adjacent Contacts 測試規格: a. 測試電壓 - 2500VDC(電源),1000VDC(信號) b. 測試持續時間 - 60 秒。 c. 試驗條件 - (760 托-海平面)。 d. 測量點相鄰點



6 Toot tomporature	The temperature rise above ambient	Current Rating – See detail in drawing.
•	shall not exceed 30 °C •	
rise for rating		The temperature rise above ambient shall not
current	溫升不能超過 30°C。	exceed 30°C.
(溫升測試)	Ambient conditions - Still air 25°C ∘	a. Ambient Conditions - Still air at 25℃
	周圍環境溫度 25°C。	b. Stabilize at a single current level until 3 readings at 5 minutes intervals are within 1°C
	Dan EIA 204 70	測試電流詳見圖面規格,環境溫度上升不得超過
	Per EIA-364-70	
	適用:EIA-364-70	30℃以下細節適用:
		a. 環境條件 - 室溫 25℃
		b. 在單個電流水準下穩定,直到 5 個間隔的 3 個讀數在 1℃內。
7. Mating	Mating force	At a speed of 25.4 mm/minute, apply axial insert
/Un-mating	Power Pin: 0.709kg/PIN Max	the mating part into fully or pull out from the subject
Force	Signal Pin: 0.102kg/PIN Max	product.
(插入力/拔出力)	Un-mating force:	以 25.4 mm /分鐘的速度,軸向完全插入對配外掛程
(1H) ()3.1VH)	Power Pin: 0.227kg/PIN Min	式到被測產品中或從被測產品中拔出。
	Signal Pin: 0.02kg/PIN Min	[2] [X] [
	插入力	
	Power Pin: 0.709kg /PIN Max	
	Signal Pin: 0.102kg /PIN Max	
	拔出力	
	Power Pin: 0.227kg /PIN Min	
	Signal Pin: 0.02kg /PIN Min	
	Per EIA-364-13	
	適用 EIA-364-13	
8. Normal Force	The contact normal force shall not be	Exert the axial pressure from carrying the plastics
(正向力)	less than 350 grams per beam for the	under the sub radian highest point at the speed of
	power contacts and 50 grams (nor	25.4mm / minute.
	greater than 120 grams) per beam for	以 25.4mm/分鐘的速度施加軸向壓力從端子弧度最
	the signal contacts	高處下壓到塑膠面。
	電源每 PIN 不能小於 350g,信號每	
	PIN 不能小於 50g 且不能大於 120g	
9. Contact	Power and signal contacts :	Apply axial pull out (push) force at a speed
Retention	13.6N/Pin. Min.	of 12.7 mm/minute on the contact assembled in
Force	電源和信號端子:每支最小 13.6N	the housing, Test 30 contacts.
(端子保持力)		以 12.7mm/分鐘的速度施加軸向拉(推)力,
		從塑膠本體上拔出(頂退)端子,測試 30 支端子。
	Per EIA-364-29 適用:EIA-364-29	



	1100001 31 2011	ICATION OF OUPTIN
10. Lock Retention Force Lock (保持力)	Lock:13.6N/Pin.Min Lock:每支最小 13.6N Per EIA-364-29 適用:EIA-364-29	Apply axial pull out (push) force at a speed of 12.7 mm/minute on the Lock assembled in the housing, Test 30 board locks. 以 12.7mm/分鐘的速度施加軸向拉力從塑膠本體上拔出耳扣,測試 30 支 Lock。
11. Thermal Shock (溫度衝擊)	After exposure to the following environmental conditions in accordance with the specified test procedure and / or details, the product shall show no physical damage and shall meet the applicable electrical and mechanical requirements of paragraphs 2~10 as detailed in Table II test sequences. Unless otherwise specified, assemblies shall be mated during exposure. 在按照規定的試驗程式和/或細節暴露於下列環境條件後,產品應無任何物理損壞,並應滿足表 II 測試順序中詳述的第 2~10 項目的適用電氣和機械要求。除非另有規定,否則組件應在暴露期間配合。	c. 每個溫度下的時間 - 根據產品品質參考EIA-364-32d. 轉移時間 - 最多 5 分鐘



12.Humidity (Steady State) (恆溫恆濕)

After exposure to the following environmental conditions in accordance with the specified test procedure and / or details, the product shall show no physical damage and shall meet the applicable electrical and b. 温度 40℃ mechanical requirements of paragraphs 2~10 as detailed in Table II test sequences. Unless otherwise specified, assemblies shall be mated during exposure.

在按照規定的試驗程式和/或細節暴露 於下列環境條件後,產品應無任何物理 損壞,並應滿足表 | 測試順序中詳述的 第 2~10 項目的適用電氣和機械要求。 除非另有規定,否則組件應在暴露期 間 配合。

Per EIA-364-31 適用: EIA-364-31

- a. Relative Humidity 95%
- b. Temperature 40°C
- c. Test Duration 96 hours
- a. 相對濕度 95%
- c. 測試持續時間 96 小時

13.High Temperature Life

(高溫壽命)

After exposure to the following environmental conditions in accordance with the specified test procedure and / or details, the product shall show no physical damage and shall meet the applicable electrical and b. 温度 125℃ mechanical requirements of paragraphs 2~10 as detailed in Table II test sequences. Unless otherwise specified, assemblies shall be mated during exposure.

在按照規定的試驗程式和/或細節暴 露於下列環境條件後,產品應無任何 物理損壞,並應滿足表 Ⅱ 測試順序中 詳述的第 2~10 項目的適用電氣和機 械要求。除非另有規定,否則組件應在 暴露期間配合。

Per EIA-364-17 適用: EIA-364-17

- a. Test Duration 21 days
- b. Temperature 125 °C
- c. Pre-condition Perform number of durability cycles specified for product
- a. 測試時間 21 天
- c. 前提條件執行為產品指定的耐用性週期數



14. Environmental Sequence (環境順序)

After exposure to the following environmental conditions in accordance with the specified test procedure and / or details, the product shall show no physical damage and shall meet the applicable electrical and mechanical requirements of paragraphs 2~10 as detailed in Table II test sequences. Unless otherwise specified, assemblies shall be mated during exposure.

在按照規定的試驗程式和/或細節暴露於下列環境條件後,產品應無任何物理損壞,並應滿足表 II 測試順序中詳述的第 2~10 項目的適用電氣和機械要求。除非另有規定,否則組件應在暴露期間配合。

Phase I – Thermal Shock, Per EIA 364-32

Phase II – Humidity, Per EIA 364-31, Method II

Phase III – High Temperature Life, Per EIA 364-17

第一階段 - 熱衝擊,適用 EIA 364-32 第二階段 -恆溫恆濕,適用 EIA 364-31,方法 Ⅱ

第三階段 - 高溫壽命,適用 EIA 364-17

Phase I - Thermal Shock, EIA 364-32

- a. Test Duration 36 cycles
- b. Temperature Range Between -55 and +125 °C
- c. Time at Each Temperature To refer to EIA 364-32 based on product mass
- d. Transfer Time 5 minutes, maximum

Phase II - Humidity, EIA 364-31, Method II

- a. Test Duration 10 days
- b. Relative Humidity 95%
- c. Temperature +40 °C

Phase III – High Temperature Life, EIA 364-17

- a. Test Duration 21days
- b. Temperature +125 °C
- c. Pre-condition Perform number of durability cycles specified for product

第一階段 - 熱衝擊

- a. 測試條件-循環 36 次
- b. 溫度範圍 -55 to +125 °C
- c. 每個溫度下的時間 根據產品品質參考 EIA-364-32
- d. 轉移時間 最多5分鐘

第二階段 -恆溫恆濕

- a. 測試持續時間 10 天
- b. 相對濕度 95%
- c. 温度- +40 °C

第三階段 - 高溫壽命

- a. 測試持續時間 21 天
- b. 温度- +125°C
- c. 前置條件 執行完產品指定的耐久性迴圈 次數



15.Industrial Mixed (IMFG)

After exposure to the following Flowing Gas (IMFG) environmental conditions in (工業混合流動氣體) accordance with the specified test procedure and / or details, the product shall show no physical damage and shall meet the applicable electrical and mechanical requirements of paragraphs 2~10 as detailed in Table II test sequences. Unless otherwise specified, assemblies shall be mated during exposure.

> 在按照規定的試驗程式和/或細節暴 露於下列環境條件後,產品應無任何 物理損壞,並應滿足表 Ⅱ 測試順序中 詳述的第 2~10 項目的適用電氣和機 械要求。除非另有規定,否則組件應在 暴露期間配合。

Per EIA 364-65 適用 EIA 364-65

- a. Class IIA
- b. Duration 20 days
- c. Mated
- d. Test contact resistance after 10 and 20 days
- a. 種類-IIA
- b. 持續時間-20 天
- c. 對配
- d. 測試 10 天和 20 天後的接觸電阻

16. Vibration (機械振動)

After exposure to the following environmental conditions in accordance with the specified test procedure and / or details, the product shall show no physical damage and shall meet the applicable electrical and mechanical requirements of paragraphs 2~10 as detailed in Table II test sequences. Unless otherwise specified, assemblies shall be mated during exposure.

在按照規定的試驗程式和/或細節暴 露於下列環境條件後,產品應無任何 物理損壞,並應滿足表 Ⅱ 測試順序中 詳述的第 2~10 項目的適用電氣和機 械要求。除非另有規定,否則組件應在 暴露期間配合。

Per EIA 364 TP 28 適用 EIA 364 TP 28

- a. Condition III
- b. Vibration Amplitude -1.524mm DA or ± 15 G
- c. Frequency Range 10 to 2000 to 10 Hz d Sweep Time and Duration – 20 minutes per cycle, 4 hours along each of three orthogonal axes (12 hours total)
- e. Mounting rigidly mount assemblies
- f. No Discontinuities of greater than 10 nano-seconds
- a. 條件 III
- |b. 振動幅度 1.524mm DA 或 ±15G
- c. 頻率範圍 10 到 2000 到 10 Hz
- d. 掃描時間和持續時間 每個週期 20 分鐘, 沿三個正交軸每個 4 小時 (總共 12 小時)
- e. 安裝 嚴格安裝組件
- f. 沒有大於 10 納秒的不連續性



17. Mechanical Shock (機械衝擊)

After exposure to the following environmental conditions in accordance with the specified test procedure and / or details, the product shall show no physical damage and shall meet the applicable electrical and mechanical requirements of paragraphs 2~10 as detailed in Table II test sequences. Unless otherwise specified, assemblies shall be mated during exposure.

在按照規定的試驗程式和/或細節暴露於下列環境條件後,產品應無任何物理損壞,並應滿足表 II 測試順序中詳述的第 2~10 項目的適用電氣和機械要求。除非另有規定,否則組件應在暴露期間配合。

Per EIA 364-27 適用 EIA 364-27

- a. Condition A (50G, 11 millisecond half sine wave)
- b. Shocks –3 shocks in both directions along three orthogonal axes. Total 18 shocks
- Installing rigid mounting components d No discontinuities of greater than 10 nano-seconds
- a. 條件 A (50G, 11 毫秒半正弦波)
- b. 衝擊在三個正交軸的兩個方向上共 3 次沖擊共 18 次
- c. 安裝 嚴格安裝組件
- d. 沒有大於 10 納秒的不連續性

18. Durability (Repeated Mating/Un-mating) (耐久性)

After exposure to the following environmental conditions in accordance with the specified test procedure and / or details, the product shall show no physical damage and shall meet the applicable electrical and mechanical requirements of paragraphs 2~10 as detailed in Table II test sequences. Unless otherwise specified, assemblies shall be mated during exposure.

在按照規定的試驗程式和/或細節暴露於下列環境條件後,產品應無任何物理損壞,並應滿足表 II 測試順序中詳述的第 2~10 項目的適用電氣和機械要求。除非另有規定,否則組件應在暴露期間配合。

Per EIA-364-09

適用: EIA-364-09

Repeat mate and unmated for connector 200 cycles, at a speed of 127mm per minute. Per 重復進行配合產品 200 次插拔,速度每分鐘 127mm。



19. Solderability (可焊性)

After exposure to the following environmental conditions in accordance with the specified test procedure and / or details, the product shall show no physical damage and shall meet the applicable electrical and mechanical requirements of paragraphs 2~10 as detailed in Table II test sequences. Unless otherwise specified, assemblies shall be mated during exposure.

在按照規定的試驗程式和/或細節暴露於下列環境條件後,產品應無任何物理損壞,並應滿足表 II 測試順序中詳述的第 2~10 項目的適用電氣和機械要求。除非另有規定,否則組件應在暴露期間配合。

Per ANSI-J-002 適用 ANSI-J-002

- a. Steam aging 4 hours
- b. PCB termination area was evaluated and meets the requirements of ANSI-J-002.
- a. 先做鹽霧 4 小時,蒸汽老化 4 小時
- b. PCB 終端面積經過評估並符合 ANSI-J-002 的要求

20. Resistance to Solder Heat (耐焊料熱)

After exposure to the following environmental conditions in accordance with the specified test procedure and / or details, the product shall show no physical damage and shall meet the applicable electrical and mechanical requirements of paragraphs 2~10 as detailed in Table II test sequences. Unless otherwise specified, assemblies shall be mated during exposure.

在按照規定的試驗程式和/或細節暴露於下列環境條件後,產品應無任何物理損壞,並應滿足表 II 測試順序中詳述的第 2~10 項目的適用電氣和機械要求。除非另有規定,否則組件應在暴露期間配合。

Per EIA 364-56 適用 EIA 364-56

- a. Temperature: 280 ± 5°C
 Immersion duration: 30 ± 2seconds
 Test Condition − E
- b. There shall be no evidence of physical or mechanical damage.
- a. 溫度:280±5℃ 浸泡時間:30 ± 2 秒 測試條件-E
- b. 沒有任何物理或機械損壞的證據



21. Salt Spray (鹽霧)

After exposure to the following environmental conditions in accordance with the specified test procedure and / or details, the product shall show no physical damage and shall meet the applicable electrical and mechanical requirements of paragraphs 2~10 as detailed in Table II test sequences. Unless otherwise specified, assemblies shall be mated during exposure.

在按照規定的試驗程式和/或細節暴露於下列環境條件後,產品應無任何物理損壞,並應滿足表 II 測試順序中詳述的第 2~10 項目的適用電氣和機械要求。除非另有規定,否則組件應在暴露期間配合。

Per EIA-364-26 適用:EIA-364-26 5±1% salt concentration(PH=7.0) ,48 hours 35±2°C.

鹽水濃度 5±1%(PH=7.0),時間 48 小時,溫度 35±2°C。



Table II: Product Qualification Test Sequence

附表二: 產品測試順序

Test Description	PAR		Test Group 測試分組													
測試描述	數量	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Conformation of	1	1	1	0	1	1	0	1	0	1	1	1	1	0	1	1
Product 產品確認		20	12	M	8	8	M	8	М	3	3		3	M	3	11
Signal Contact	2	3	3	1	2		ı	2	ı					ı		2
Resistance		6	6	Т	6		Т	6	Т					Т		7
信號接觸阻抗		9	10	Т			Т		Т					Т		
		14		E			E		E					ED		
		17		D			D		D							
Power Contact	3	4	4		3			3								3
Resistance		7	7		7			7								8
電源接觸阻抗		10	11													
		15														
		18														
Insulation Resistance	4					2										4
絕緣阻抗		1				6										9
Dielectric	5					3										5
Withstanding Voltage						7										10
耐電壓																
Test temperature rise	6									2						
for rating current																
溫升測試																
Mating /Un-mating	7	2	2													
Force		11	8													
插入力/拔出力		13														
N IF		19														
Normal Force	8															
正向力	1	1							1							
Contact Retention	9												2			
Force 端子保持力																
上のck Retention Force	10								+						2	
Lock 保持力	10														_	
Thermal Shock	11	+				4			1							
温度沖擊	''					4										
温度冲撃 Humidity (Steady	12	+				5										
State)	12					3										
恆溫恆濕																
\triangle \rightarrow \text{\text{W}} \text{\text{CI_\text{W}}} \t																<u> </u>



High Temperature Life	13					5					
高溫壽命											
Environmental		5									
Sequence											
環境順序		8									
Phase I 第一階段	14										
Phase II 第二階段		16									
Phase III 第三階段											
Industrial Mixed	15		9								
Flowing Gas (IMFG)											
工業混合流動氣體											
Vibration	16			4							
機械振動											
Mechanical Shock	17			5							
機械衝擊											
Durability (Repeated	18	12	5				4				
Mating/Un-mating)											
耐久性											
Solderability	19							2			
可焊性											
Resistance to Solder	20								2		
Heat 耐焊料熱											
Salt Spray	21										6
鹽霧											

Table III: Weld the curve graph in crest

附表三:波峰焊曲線圖

