



OUPIIN ELECTRONIC (KUNSHAN) CO.,LTD.

歐品電子(昆山)有限公司

Environmental test report

產品環境性能測試報告

Product Name (品名)		100A Power Connector			Date(日期)	2023.09.27				
Part Number (料號)		9310-1P04C3SAA01 9310-4P04C3SAA01			Quantity(數量)	46PCS				
Test Requirements (測試要求)	No.	Test item (測試項目)	Specification (規格)	Test Equipment (試驗設備)	Result (結果)					Judgement (判定)
ELECTRICAL PERFORMANCE (電氣特性)	1	Confirmation of Product (產品檢查)	Conform to the product drawing (須符合產品圖面)	Visual (目視)	OK	OK	OK	OK	OK	OK
	2	Contact Resistance (接觸電阻)	Power Pin: 0.70 mΩ Max. initial; Power Pin: 初始狀態最大0.70 mΩ;	Contact resistance testing machine (接觸電阻測試儀)	0.34	0.32	0.29	0.33	0.30	OK
	3	Insulation Resistance (絕緣阻抗)	Insulation Resistance Power Pin:1500 MQ Min. 產品絕緣電阻Power Pin:最小1500 MQ	Insulation resistance testing machine (絕緣阻抗測試儀)	PASS	PASS	PASS	PASS	PASS	OK
	4	Dielectric strength (耐電壓)	Power Pin must withstand test potential of 1500 VDC RMS for 1 minute, current leakage must be 1mA Max. Power Pin必須承受測試電壓:1500 VDC RMS. 時間1分鐘. 漏電流不大於1 mA.	Withstanding Voltage testing machine (耐電壓測試儀)	PASS	PASS	PASS	PASS	PASS	OK
	5	Coplanarity (共面度)	Initial : 0.1mm Max	Image measuring instrument 影像測量儀	0.03	0.02	0.02	0.01	0.03	OK
	After testing : 0.1mm Max		0.06		0.07	0.07	0.05	0.06	OK	
6	Temperature Rise Test (溫升測試)	The test temperature above ambient shall not exceed 130°C for 1h. 測試溫度不能超過以 ambient 的 130°C 值. Ambient conditions - Still air 25°C. 周圍環境溫度 25°C.	Temperature Rise Testing Machine (溫升測試儀)	Refer to annexed page (見附頁)					OK	
MECHANICAL PERFORMANCE (機械特性)	7	Contact Retention Force (端子保持力)	Power Pin:8N/Pin. Min. Power Pin每支最小8N.	Automatic insertion and withdrawal force testing machine (自動插拔力試驗機)	31.54	34.21	36.05	33.27	32.91	OK
	8	Mating /Un-mating Force (插入力/拔出力)	Mating force : 72N Max; 插入力:72N Max		47.59	48.2	49.72	48.25	47.81	OK
	Un-mating force:10NMin; 拔出力:10N Min		43.23		40.68	42.9	41.83	40.91	OK	
	9	Durability (Repeated Mating/Un-mating) (耐久性)	Power Pin: 0.70 mΩ Max. initial. Contact resistance change 0.20 mΩ. Power Pin: 初始狀態最大0.70 mΩ. 接觸電阻變化值:0.20mΩ.	Automatic insertion and withdrawal force testing machine (自動插拔力試驗機)	Refer to annexed page (見附頁)					OK
	10	Vibration Sinusoidal Low Frequency (低頻正弦振動)	No electrical discontinuity greater than 1 μs shall occur, Power Contact resistance change 0.20 mΩ. 不允許出現超過 1 μs 的瞬間斷開. 接觸電阻 Power Pin最大變化值:0.20mΩ.	Shock tester (振動試驗機)	Refer to annexed page (見附頁)					OK
11	Mechanical Shock (機械衝擊)	No electrical discontinuity less than 1us. 電流斷開時間小於1us.	Mechanical Shock Test Machine (機械衝擊試驗機) Oscilloscope (示波器)	Refer to annexed page (見附頁)					OK	
ENVIRONMENT PERFORMANCE (環境特性)	12	Thermal Shock (熱衝擊)	After testing, no damage, Power Contact resistance change 0.20 mΩ. 測試後產品無損壞. 接觸電阻: Power Pin最大變化值:0.20 mΩ.	Programmable Thermal shock tester/oven (高低溫試驗箱/烤箱)	Refer to annexed page (見附頁)					OK
	13	Humidity (Steady State) (恆溫恆濕)		humidity&temperature (可程式恆溫恆濕試驗機)	Refer to annexed page (見附頁)					OK
	14	Salt Spray (鹽霧)		Salt Spray Tester (鹽水噴霧試驗機)	Refer to annexed page (見附頁)					OK
	15	High Temperature Life (高溫老化)		Constant temperature chamber (恆溫乾燥箱)	Refer to annexed page (見附頁)					OK
	16	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.5% maximum dewetting. 產品在測試完成後. 在放大倍數為10倍的顯微鏡下. 檢查外觀損壞如: 小孔. 空焊. 外觀粗糙度. 未沾錫區不大於5%	Tin stove (錫爐)	Refer to annexed page (見附頁)				
Remarks 備註:										
Notes : 1.Accept : OK, Reject : NG 注釋 (符合標準:OK, 不符合標準:NG)				2.This should be noted in the remark column if other abnormalities be occur. (若有其它異常登錄於備註欄)						
Approved by : Rain				Checked by: Rain			Tested by : Echo			

QWIP-049-R02