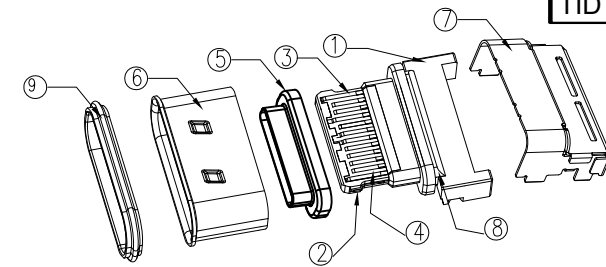


REV.	NOTES	DATE
A	RELEASED	2024/04/12

TID :



SPECIFICATIONS:

1. ELECTRICAL CHARACTERISTICS:

- 1-1. RATING: 20V 5A FOR COLLECTIVELY POWER SUPPLY
PIN(PIN1,A4,A9,A12,B1,B4,B9,B12): 1.25A FOR VCONN PIN; 0.25A FOR OTHER SIGNAL PIN.
1-2. CONTACT RESISTANCE: 40mΩ Max FOR INITIAL. 10mΩ CHANGE AFTER TEST.
1-3. DIELECTRIC WITHSTANDING VOLTAGE: 100V AC FOR ONE MINUTE
1-4. INSULATION RESISTANCE: 100MΩ MIN. MEASURED BY 100 VDC

2. MECHANICAL CHARACTERISTICS:

- 2-1. INSERTION FORCE : 5~20N.
2-2. WITHDRAWAL FORCE : 8~20N. AFTER LIFE TEST ,
UN-MATING FORCE: 6~20N;
3. LIFE TEST: 10000 CYCLES .
4. TO CONFORM TO SINGATRON HAZARDOUS SUBSTANCE FREE SPECIFICATION
5. HALOGEN FREE PRODUCT IDENTIFICATION LOGO ON PACKAGING;
6. PACKAGING: REEL

9	LIM	silica gel	BLACK	1PCS
8	GLUE	silica gel	BLACK	1PCS
7	OUTOR SHELL	SUS304	NICKEL: 30u" Min	1PCS
6	SMALL SHELL	SUS316	CLEAN	1PCS
5	EMI	SUS316	NICKEL: 30u" Min	1PCS
4	BOTTOM CONTACT	C18400	15u" Au PLATING ON CONTACT AREA GOLD FLASH PLATING AT SOLDER AREA 50u" Min NICKEL OVERALL	1SET
3	TOP CONTACT	C18400		1SET
2	MID PLATE	SUS301	NICKEL: 30u" Min	1PCS
1	MOLDING HOUSING	PA46	UL94V-0 BLACK	1PCS
NO.	DESCRIPTION	MATERIAL	REMARKS	QTY

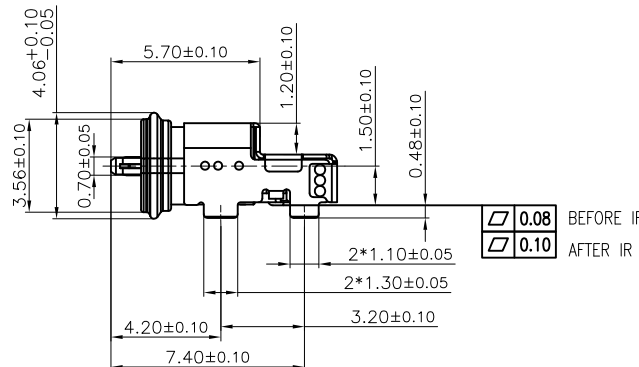
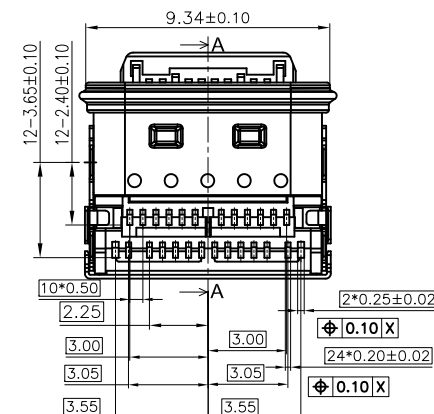
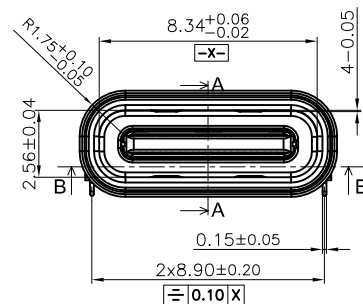
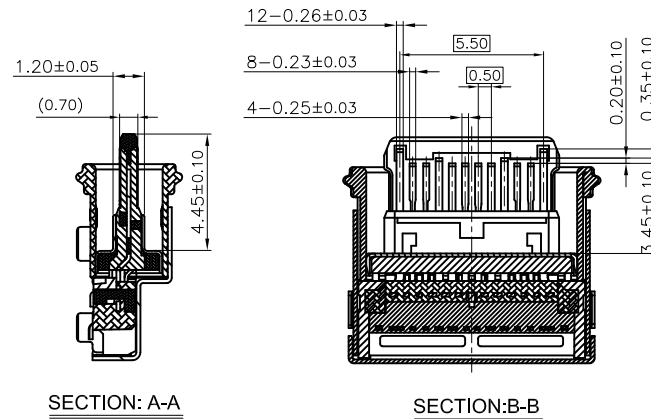
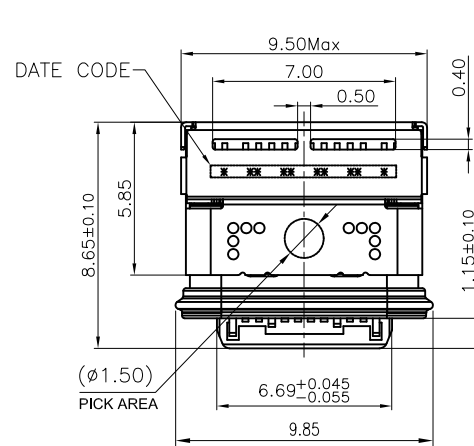
單位(UNITS)	mm
數量(QT'Y)	N/A
材料(MT'L)	SEE NOTE
處理(FINISH)	SEE NOTE

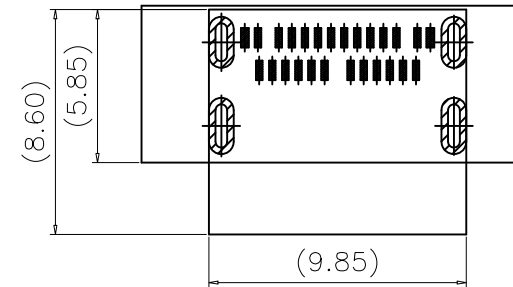
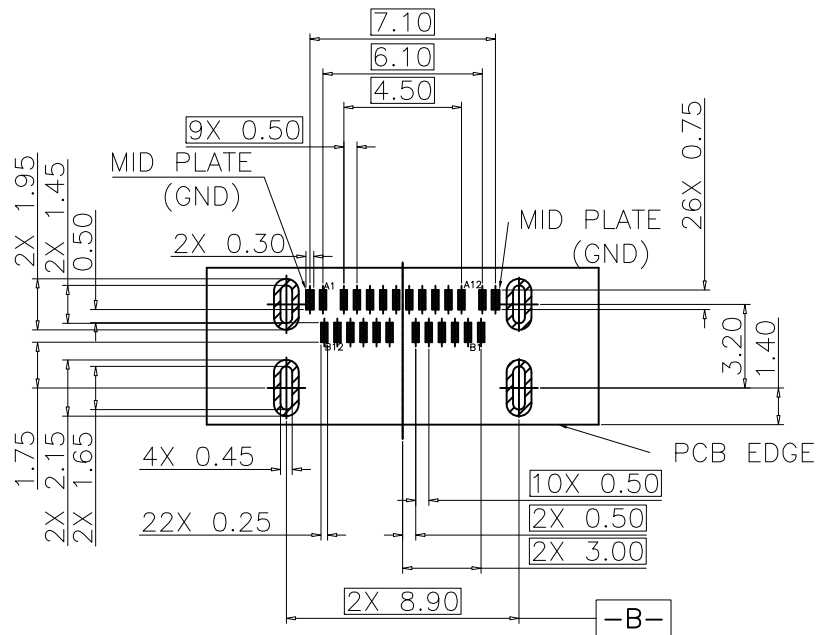


圖名(NAME)
USB Gen2 Type-C 24pin waterproof IP67SMT CH=1.5mm

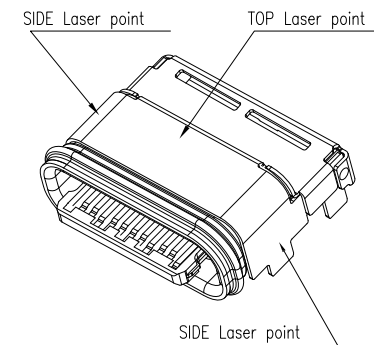
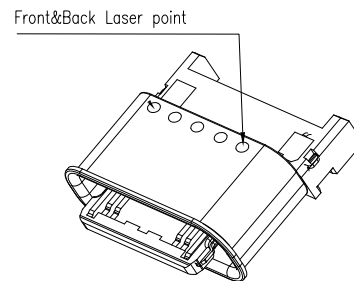
料號(PART NUMBER)	HTCC270047
圖號(DRAW NUMBER)	
圖檔(FILE NAME .DWG)	
比例(SCALE)	1/1
圖紙(SIZE)	A4
頁次(SHEET)	1/3
版次(REV.)	A

DIMENSIONS TOLERANCE METRIC
X : ±0.5
X.X : ±0.30
X.XX : ±0.20
ANGLES
X : ±1°
X.X : ±0.5°





PIN	Signal Name	Description	PIN	Signal Name	Description
A1	GND	Ground return	B12	GND	Ground return
A2	SSTXp1	Positive half of first SuperSpeed TX differential pair	B11	SSRXp1	Negative half of first SuperSpeed RX differential pair
A3	SSTXn1	Negative half of first SuperSpeed TX differential pair	B10	SSRXn1	Positive half of first SuperSpeed RX differential pair
A4	Vbus	Bus Power	B9	Vbus	Bus Power
A5	CC1	Configuration Channel	B8	SBU2	Sideband Use (SBU)
A6	Dp1	Positive half of the USB 2.0 differential pair-Position 1	B7	Dn2	Negative half of the USB 2.0 differential pair-Position 2
A7	Dn1	Negative half of the USB 2.0 differential pair-Position 1	B6	Dp2	Positive half of the USB 2.0 differential pair-Position 2
A8	SBU1	Sideband Use (SBU)	B5	CC2	Configuration Channel
A9	Vbus	Bus Power	B4	Vbus	Bus Power
A10	SSRXn2	Negative half of second SuperSpeed RX differential pair	B3	SSTXn2	Negative half of second SuperSpeed TX differential pair
A11	SSRXp2	Positive half of second SuperSpeed RX differential pair	B2	SSTXp2	Positive half of second SuperSpeed TX differential pair
A12	GND	Ground return	B1	GND	Ground return

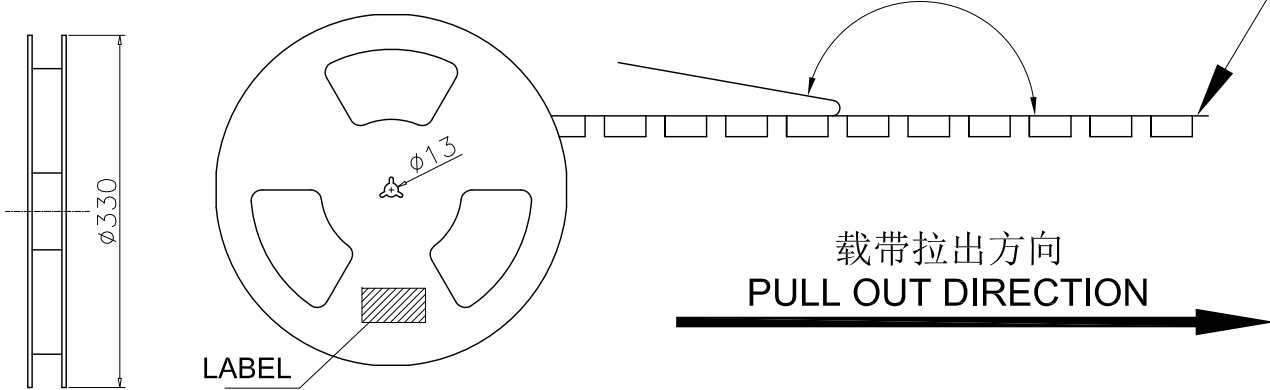


DIMENSIONS TOLERANCE METRIC	
X	±0.5
X.X	±0.30
X.XX	±0.20
ANGLES	
X	±1°
X.X	±0.5°

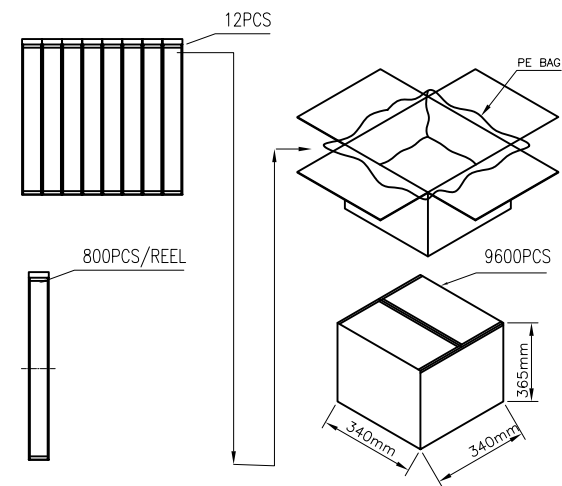
單位(UNITS)	mm	 瑞澤電子股份有限公司 Horustech Electronics Co., Ltd.			
數量(QUANTITY)	N/A				
材料(MATERIAL)	SEE NOTE				
處理(FINISH)	SEE NOTE				
繪圖(DRAW)		圖名(NAME) USB Gen2 Type-C 24pin waterproof IP67SMT CH=1.5mm			
設計(DESIGN)		料號(PART NUMBER)	HTCC270047		
審校(CHECK)		圖號(DRAW NUMBER)			
核准(APPROVED)		圖檔(FILE NAME .DWG)			
比例(SCALE)	1/1	圖紙(SIZE)	A4	頁次(SHEET)	2/3
		版次(REV.)	A		

COVER TAPE PEELING ANGLE:165~180°

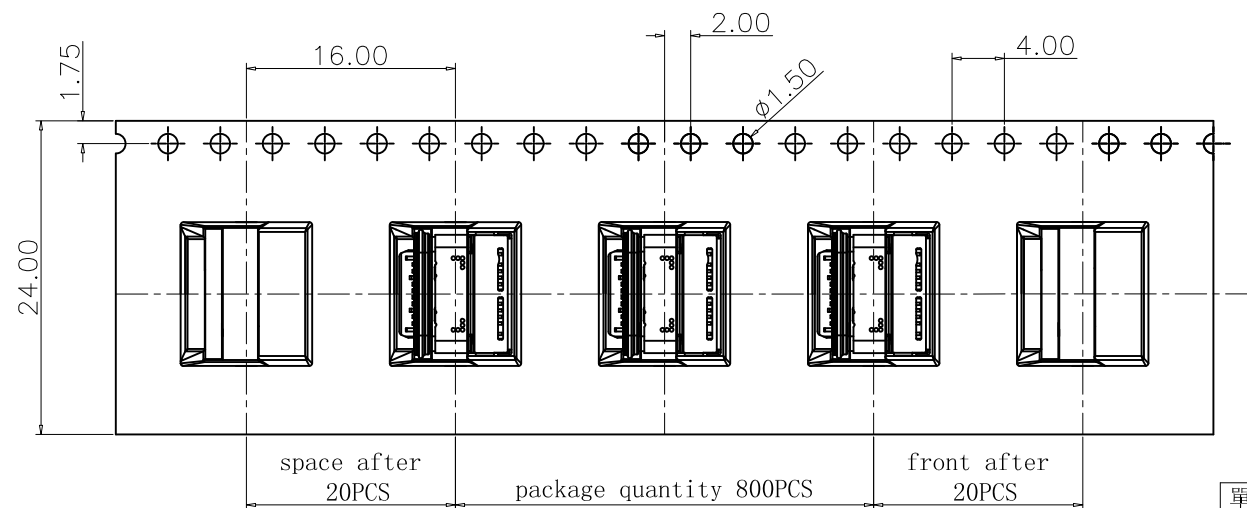
COVER TAPE



載帶拉出方向
PULL OUT DIRECTION



外包装箱规格



PACKING CAPACITY		
PCS/REEL	REEL/CARTON	PCS/CARTON
800	12	9600

DIMENSIONS TOLERANCE METRIC	
X	:±0.5
X.X	:±0.30
X.XX	:±0.20
ANGLES	
X	:±1°
X.X	:±0.5°

單位(UNITS)	mm	 瑞澤電子股份有限公司 Horustech Electronics Co., Ltd			
數量(QT'Y)	N/A				
材料(MT'L)	SEE NOTE				
處理(FINISH)	SEE NOTE				
繪圖(DRAW)		圖名(NAME) USB Gen2 Type-C 24pin waterproof IP67SMT CH=1.5mm			
設計(DE'N)		料號(PART NUMBER)		HTCC270047	
審核(CH'K)		圖號(DRAW NUMBER)			
核准(APP'D)		圖檔(FILE NAME .DWG)			
比例(SCALE)	1/1	圖紙(SIZE)	A4	頁次(SHEET)	3/3
				版次(REV.)	A



Product Specification 【產品規範】		Subject 【主題】	TYPE-C SERIES	
Document No: 【文件編號】	HRS-CR-PS-0033	Rev: 【版本】	A	Page 1 of 5 【頁碼】

Revision Record 【修訂記錄】				
Rev 【版本】	Date 【日期】	Page 【頁碼】	ECN No.	Description of Change 【說明】
A	2023-08-16	5		NEW RELEASE

Page	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Content Rev	A																			
Attachment Rev																				

Approved by	FRANK	Checked by	JASON	Prepared by	SAM
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Product Specification 【產品規範】		Subject 【主題】	TYPE-C SERIES	
Document No: 【文件編號】	HRS-CR-PS-0033	Rev: 【版本】	A	Page 2 of 5 【頁碼】

一 SCOPE (適用範圍):

This specification is applied to the requirements for TYPE-C connector,
This specification covers the materials ,ratings, electrical, mechanical and environmental
performance of the applicable product description and test method.

(本規範適用 TYPE-C SERIES connector , 內容包括:物料規格,
產品規格及電氣特性,機構特性,環境特性及測試方式.)

二 PRODUCT NAME AND PART NUMBER (產品名稱和料號):

Product Name 產品名稱	Part Number 產品料號
TYPE-C SERIES	HTCC270047

三 MATERIAL (材質):

- a) Housing (膠芯):(參考產品圖紙)
- b) Contact (端子):(參考產品圖紙)
- c) Plating (電鍍):(參考產品圖紙)

四 GENERAL SPECIFICATION (基本規格):

Product shall be of the design , construction and physical dimensions Specified
in the applicable product drawing .

(產品要符合產品圖規定的設計, 結構和尺寸要求 .)

- 4-1 Current rating (額定電流) : 5.0A FOR Vbus PIN,
1.25A FOR Vconn PIN, 0.25A FOR OTHER PINS.
- 4-2 Rated Voltage (額定電壓) : 20V AC MAX:
- 4-3 Operating environment and temperature (使用環境及溫度) .
Temperature (使用溫度) : -25℃ to +85℃
Enviroment (相對濕度) : 20% to 90% RH

五 FIGURE AND DIMENSION (外 形 與 尺 寸):

See applicable product drawing.
(參考產品圖紙)



Product Specification 【產品規範】		Subject 【主題】	TYPE-C SERIES	
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六 ELECTRICAL (電 氣 性 能):

NO. 序 號	ITEM 項 目	CONDITION AND TEST METHOD 測 試 條 件 與 方 法	SPECIFICATION 規 格
6-1	接觸阻抗 Contact Resistance	相對應的連接器,測試微電阻接觸阻抗 (直流點 20mV 最大,100mA 最大.) The pad and connector were mated.Low-level current was applied and resistance measurements were taken.See Figure 1 (DC 20mV Max., 100mA Max.) EIA--364-23	铁壳初始时最大 50 毫欧 端子初始时最大 40 毫欧 测试后最大增加 10 毫欧 50mΩ max for shield (initial) 40mΩ max for other (initial) 10mΩ max change for post test
6-2	絕 緣 阻 抗 Insulation resistance	在產品所有相鄰的兩端子間施加 100V DC 電壓測試絕緣阻抗. [Measurements insulation resistance on unmated connectors.A potential of 100V DC was applied between all contacts.] EIA-364-21	100 MΩ Min 100 MΩ 最小
6-3	耐電壓 Dielectric Strength	在產品相鄰的兩端子間施加電壓並持續 1 分鐘. [The potential was applied between adjacent contacts of the connector for one minute.] EIA- 364-20	无击穿和飞弧现象 There shall be no breakdown

七 MECHANICAL (機 械 性 能):

NO. 序 號	ITEM 項 目	CONDITION AND TEST METHOD 測 試 條 件 與 方 法	SPECIFICATION 規 格	
7-1	插拔力 Insertion Withdrawal force	操作速度 12.5mm /min.. 1.Measure force at maximum rate of 12.5mm (0.492") per minute EIA-364-13	Insertion force 插入力	5N~20N
			Withdrawal force 拔出力	8N~20N.



Product Specification 【產品規範】		Subject 【主題】	TYPE-C SERIES	
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7-2	耐插拔 Durability	1 相配對的公母插入及拔出 10000 次,以每小時 100+/-50 次的速度. [Mate and unmate samples for 10000cycles at maximum rate of 100+/-50 cycles per hour.] EIA--364-092.	appearance 外觀	No Damage Or deformation 無損壞 或變形
			Contact Resistance 接觸阻抗	50mΩ Max 50mΩ 最大
			Insertion force 插入力	5N~20N
			Withdrawal force 拔出力	6N~20N.

八 THERMAL (耐熱性能) :

8-1	可焊性 [Solderability]	1.沾 5~10 秒助焊劑後,再將引腳置入 245°C ± 5°C 的錫槽內 5 ± 0.5 秒. 2.[After 5~10 seconds flux deep. Subject connector lead to solder bath at 245°C ±5°C for 5 ± 0.5 seconds.] 3.MIL-STD-202, Method 208	Appearance 外觀	1.外觀:無明顯損傷現象. [1.Appearance : No evidence of physical damage.] Wet Solder Coverage: 95% Min.
8-2	高溫壽命 [Temperature Life (Heat)]	樣品放入溫度為 105 度的環境中 120 小時,然後放置在室溫環境中 3 小時. [The specimens shall be subjected to a temperature of105°C for 120hours, then placed in ambient temperature for 3 hours.] EIA-364-17, Method 1005.1	Appearance 外觀 Contact Resistance: 接觸阻抗	1.外觀:無明顯損傷現象. [1.Appearance : No evidence of physical damage.] 2.接觸阻抗:40mΩ MAX. [2.Contact Resistance:40mΩ Max.]



Product Specification 【產品規範】		Subject 【主題】	TYPE-C SERIES	
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8-3	低溫壽命 [Temperature Life (Cold)]	樣品放入溫度為-20℃度的環境中 96 小時,然後放置在室溫環境中要超過 3 小時. [Test Procedures:The specimens shall be subjected to a temperature of -20℃ for 96 hours, then placed in ambient temperature for more than 3 hours.] EIA-364-17 method A	Appearance 外觀 Contact Resistance: 接觸阻抗	1.外觀:無明顯損傷現象. [1.Appearance : No evidence of physical damage.] 2.接觸阻抗:40mΩ MAX [2.Contact Resistance:40mΩ Max.]
8-4	耐濕性 [Humidity]	Cycle the connector between 25 °C ±3 °C at 80 % ±3% RH and 65 °C ±3 °C at 50 % ±3% RH. Ramp times should be 0.5 hour and dwell times should be 1.0 hour. Dwell times start when the temperature and humidity have stabilized within the specified levels. Perform 24 such cycles. EIA-RS-364-31	Appearance 外觀 Contact Resistance: 接觸阻抗	1.外觀:無明顯損傷現象. [1.No evidence of physical damage.] 2.接觸阻抗:40mΩ MAX [2.Contact resistance 40 mΩ.]
8-5	鹽水噴霧 [Salt Spray]	樣品將放置在鹽濃度 5+/-1%,溫度 35+/-2℃的環境中 48 小時,測試完成以後再放置在常溫下一小時. The specimens shall be subjected to a salt Water spray (concentration:5+/-1%) at a temperature of 35+/-2℃ for 48 hours,then placed in ambient temperature for more than 1 hour. EIA-RS-364-26	Appearance 外觀	1.外觀:無明顯損傷現象. [1.No evidence of physical damage.]
8-6	高溫測試:IR 爐 [high temperature heat Performance Test :IR-reflow]	Temperature (°C) Time(sec.)	Appearance 外觀	1.外觀:無明顯損傷現象. [1.No evidence of physical damage.]