

Product Name	CQ1-B 4 IN 1 CONNECTOR	Rev.	A
Part Number.	1140-11021002-100	Date	2007-11-16
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Product Specification

产 品 规 格 书

Prepared by: Rain Zheng

制 定:

Checked by: Chain Feng

审 核:

Approved by: Chain Feng

核 准:

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1. 適用範圍

本規格書適用於旭竣電子 CQ1-B 記憶卡連接器 (Memory Stick Card, SD Memory Card, Multi Media Card, XD-Picture Card)

2. 規格

- (1) 最大額定電壓：3.3V/ 5V (AC/DC)
- (2) 最大額定電流：0.5A
- (3) 使用溫度範圍：-25~+90°C

3. 性能

除其它特別要求外,所有測試需依以下條件執行
 常溫：15~35°C.
 常濕：50~85%RH.

4. 形狀、尺寸及材質

構造、尺寸、產品主要的材質、表面處理等參考所附產品圖面.

1. Scope

This product specification is applied for Comtek Electronics CO., LTD. CQ1-B memory card Connector (Memory Stick Card, SD Memory Card, Multi Media Card, XD-Picture Card)

2. Specification

- 1) Maximum rating voltage：3.3V/ 5V (AC/DC)
- 2) Maximum rating current：0.5A
- 3) Temperature range：-25~+90°C.

3. Environmental condition

All performance test。 Unless otherwise specified, is taken as per following environmental condition.
 Ambient temperature：15~35°C.
 Ambient humidity：50~85%RH.

4. Configurations dimensions and materials

See the product drawing attached.

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5. 評定標準(RATINGS)

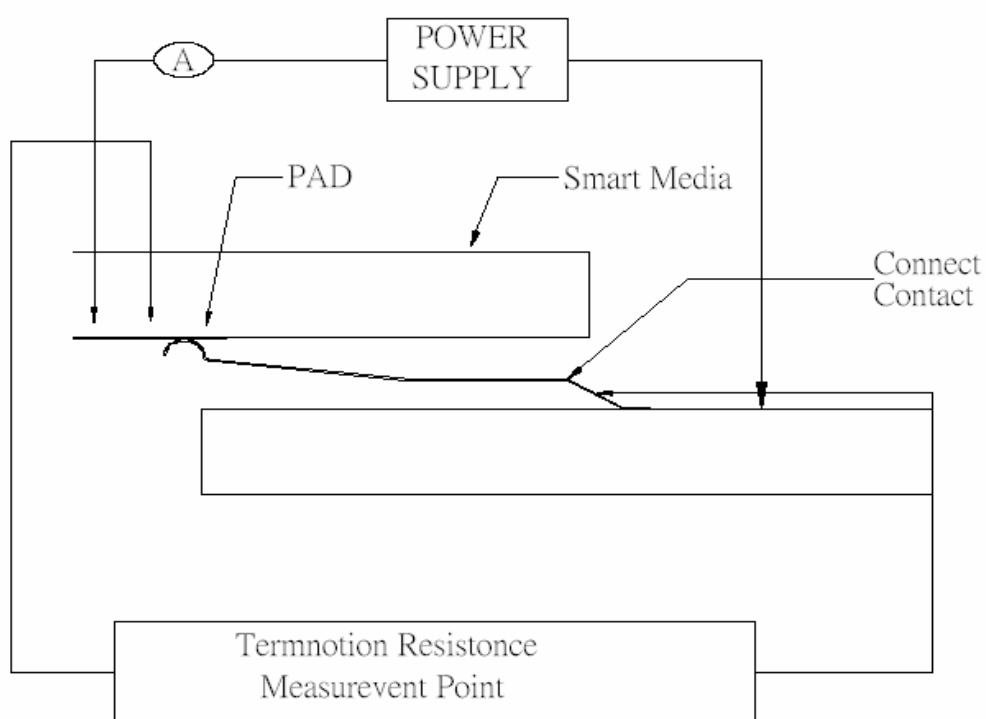
ITEM 項目	RATINGS 評定標準
Rated current 額定電流	0.5 A per contact(各觸點 0.5A)
Dielectric withstanding voltage 耐電壓	AC 500V r.m.s (1 minute 分)
Insulation Resistance 絕緣阻抗	1000 MΩ Min.
Contact Resistance (SD MEMORY CARD) 接觸阻抗 (電阻)	30 mΩ Max.
Contact Resistance (MEMORY STICK CARD) 接觸阻抗 (電阻)	40 mΩ Max.
Contact Resistance (MULTI MEDIA CARD) 接觸阻抗 (電阻)	30 mΩ Max.
Contact Resistance (XD-PICTURE CARD) 接觸阻抗 (電阻)	100 mΩ Max.
Operating Temperature (SD MEMORY CARD) 運行溫度	-25°C ~ +90°C
Storage Temperature (SD MEMORY CARD) 儲存溫度	-40°C ~ +90°C
Operating Temperature (MEMORY STICK CARD) 運行溫度	-20°C ~ +65°C
Storage Temperature (MEMORY STICK CARD) 儲存溫度	-40°C ~ +70°C
Operating Temperature (MULTI MEDIA CARD) 運行溫度	-25°C ~ +90°C
Storage Temperature (MULTI MEDIA CARD) 儲存溫度	-40°C ~ +90°C
Operating Temperature (XD-PICTURE CARD) 運行溫度	-25°C ~ +85°C
Storage Temperature (XD-PICTURE CARD) 儲存溫度	-40°C ~ +85°C
Humidity 濕度	95% RH MAX.
Flammability 可燃性	Insulator Material UL94V-0 絕緣材料 UL94V-0

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6. 特性(Performance)

6-1. 電氣的性能 (Electronics performance)

No	Items/項目	Test Conditions / 測試條件	Specifications/規格
1	Contact Resistance (接觸阻抗)	<p>1-1.Memory Stick Card / SD Memory Card / Multi Media Card :</p> <p>It shall be measured by the dry electric circuit specified as follow: 1mA,20mV, 1kHz,frequenc. Measured in accordance with IEC 512-2-2A. (在 1mA,20mV,1kHz 頻率的驅動電路下測試評估.)</p> <p>1-2. XD-Picture Card :</p> <p>Mate with a test card, and measure at an open Voltage of 20mV or less and short-circuit current of 10mA or less. Measured in accordance with JIS C5402 5.4. (在短路電流 10mA,開放電壓 20mV 的驅動電路下測試評估.)</p>	<p>(1)Memory Stick Card :</p> <p>Initial(測試前) : $\leq 40m\Omega$ After each test(測試後) : $\leq 500m\Omega$</p> <p>(2) SD Memory Card / Multi Media Card :</p> <p>Initial(測試前) : $\leq 30m\Omega$ After each test(測試後) : $\leq 100m\Omega$</p> <p>(3)XD-Picture Card :</p> <p>Initial(測試前) : $\leq 100m\Omega$ After each test (測試後) : $\leq 140 m\Omega$</p>



The diagram illustrates the measurement setup for contact resistance. A power supply is connected to an ammeter (A) and a 'Connect Contact' point. The 'Connect Contact' is connected to a 'Smart Media' component. The 'Smart Media' is connected to a 'PAD' on a board. The 'PAD' is connected to a 'Termnition Resistance Measurevent Point'.

Fig 1 Measuring Point Of Contact Resistance

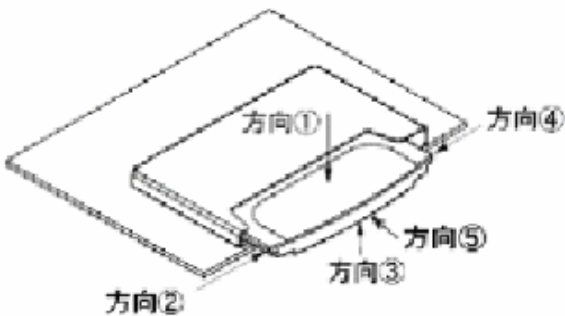
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No	Items/項目	Test Conditions / 測試條件	Specifications/規格	
2	Dielectric Withstanding Voltage (耐電壓)	<p>2-1. Memory Stick Card /SD Memory Card / Multi Media Card :</p> <p>It shall be measured when AC 500 V shall be applied for one minute to between next terminals.</p> <p>Measured in accordance with IEC 512-2-4A / MIL-STD-202 method 301.</p> <p>(相鄰兩端使用 500 V 交流電測試 1 分鐘)</p> <p>2-2.XD-Picture Card :</p> <p>Apply a voltage of 250 V AC effective (rms) for one minute between adjacent pins and between pins and earth.</p> <p>Measured in accordance with JIS C5402 5.1 / MIL-STD-202 method 301.</p> <p>(相鄰兩端使用 250 V 交流電測試 1 分鐘.)</p>	Should not have any changes (無任何變化)	
3	Insulation Resistance (絕緣阻抗)	<p>3-1 Memory Stick Card / SD Memory Card / Multi Media Card :</p> <p>It shall be measured when 500V DC is applied for one minute to between next terminals.</p> <p>(相鄰兩端使用 500 V 直流電做 1 分鐘測試評估)</p> <p>Measured in accordance with IEC 512-2-3A / MIL-STD-202 method302.</p> <p>3-2. XD-Picture Card :</p> <p>Measure with an applied voltage of 250 V DC between adjacent pins and between pins and earth.</p> <p>Measured in accordance with JIS C5402 5.2 / MIL-STD-202 method 302.</p> <p>(相鄰兩端使用 250 V 直流電做測試評估.)</p>	<p>Initial(測試前) : $\geq 1000M\Omega$</p> <p>After each test(測試後) : $\geq 100M\Omega$</p>	
4	Appearance (外觀)	Visual. (目視)	Should not have any flaw Scratch discoloration and crushed (無任何裂痕、刮傷、污染和變形)	

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6-2. 機械特性(Functional performance)

No	Items/項目	Test Conditions / 測試條件	Specifications/規格
1	Insertion / Extraction force (插入力/ 拔出力)	<p>1-1.Memory Stick Card /SD Memory Card / Multi Media Card : The contact and card shall be mated and unmated and measured the insertion and extraction force. In accordance with PC Card Standard (Volume 3) Physical specification Section 8.1. (EIA-364-B Class1.1) / DIN IEC 512 Part 7. (測試連接器與卡的插入力、拔出力.)</p> <p>1-2.XD-Picture Card : Insert and extract a test card at a speed of 25mm per Minute. Lock/unlock force : This applies to a connector with eject mechanism. Measure the card insertion force when locked and when unlocked, or the maximum force of the eject mechanism. Insertion force, Extraction force : This applies to both manual and mechanical eject connectors.When measuring insertion and extraction force, the eject mechanism must be locked and the card lock must be unlocked. Measured in accordance with XD-Picture Card Standard. (測試卡的插拔測試速度 25mm/Min. 鎖住/未鎖住的力量 : 此適用在卡片的插入/拔出是以全自動退卡機 械裝置進行,測試鎖住/未鎖住測試卡的插入力 及機械最大的退卡力量. 插入/拔出力 : 此適用在卡片的插入/拔出是以人工或半自動 退卡機械裝置進行,當測試插入/拔出力時,退卡 的機械設備須呈現”上鎖”狀態,而測試卡便為” 未上鎖”狀態.)</p>	<p>(1) Memory Stick Card : Insertion(插入力) : 10N Max Extraction(拔出力) : 1-10N</p> <p>(2) SD Memory Card : Insertion(插入力) : 40N Max Extraction(拔出力) : Min1N</p> <p>(3) Multi Media Card : Insertion(插入力) : 40N Max Extraction(拔出力) : Min2N</p> <p>(4) XD-Picture Card : (a) With eject mechanism (全自動機械測試) : Lock/Unlock Force : 22.0N Max Insertion(插入力) : 10N Max Extraction(拔出力) : 1-20N (b)Both manual and mechanical eject Connectors(手工或 半自動機械測試) : Lock/Unlock Force : 22.0N Max Insertion(插入力) : 10N Max Extraction(拔出力) : 1-20N</p>

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No	Items/項目	Test Conditions / 測試條件	Specifications/規格	
2	Lift Test (壽命測試)	<p>2-1.SD Memory Card / Multi Media Card :</p> <p>The contact and card shall be mated and mated total 5,000 times and measured the contact resistance after the test.</p> <p>Measured in accordance with SD / MMC Card Standard.</p> <p>(通過連接器與卡的插入、拔出共 5,000 次後, 測試其接觸阻抗.)</p> <p>2-2.Memory Stick Card :</p> <p>The contact and card shall be mated and mated 6,000 time and measured the contact resistance after the test.</p> <p>Measured in accordance with MS Card Standard.</p> <p>(通過連接器與卡的插入、拔出各 6,000 次後, 測試其接觸阻抗.)</p> <p>2-3.XD-Picture Card Lift Test(壽命測試) :</p> <p>2-3-1. Repeated Mate/Un-mate for Manual Eject Connector (手插方式測試)</p> <p>Repeat insertion and extraction of test card at a rate of 400 to 600 times per hour, 5,000 cycles.</p> <p>During insertion and extraction, measure noise characteristics under load current.</p> <p>After testing, confirm contact resistance, insertion and extraction force, and appearance.</p> <p>(Test card may be replaced with a new one every 1,000 times).</p> <p>以每小時 400~600 次頻率的測試卡反復做插拔測試 5,000 次.在插拔過程中,在負荷電流條件下測出異音.測試后,確認接觸阻抗,插拔力,及外觀.(測試卡可以用 1,000 次的新卡取代.)</p>	<p>(1) Memory Stick Card :</p> <p>Insertion(插入力) : 10N Max</p> <p>Extraction(拔出力) : 1-10N</p> <p>Contact Resistance : $\leq 500m\Omega$</p> <p>(2) SD Memory Card :</p> <p>Insertion(插入力) : 40N Max</p> <p>Extraction(拔出力) : Min1N</p> <p>Contact Resistance : $\leq 100m\Omega$</p> <p>(3) Multi Media Card :</p> <p>Insertion(插入力) : 40N Max</p> <p>Extraction(拔出力) : Min2N</p> <p>Contact Resistance : $\leq 100m\Omega$</p> <p>(4)XD-Picture Card :</p> <p>(a) Repeated Mate/Un-mate for Manual Eject Connector (手插方式測試)</p> <p>Lock/Unlock Force : 22.0N Max</p> <p>Insertion(插入力) : 10N Max</p> <p>Extraction(拔出力) : 1-20N</p> <p>Contact Resistance : $\leq 140m\Omega$</p> <p>(b) Repeated Mate/Un-mate for Eject Mechanism Connector(機械測試) :</p> <p>Lock/Unlock Force : 22.0N Max</p> <p>Insertion(插入力) : 10N Max</p> <p>Extraction(拔出力) : 1-20N</p> <p>Contact Resistance : $\leq 140m\Omega$</p>	

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	<p>2-3-2. Repeated Mate/Un-mate for Eject Mechanism Connector(機械測試)</p> <p>Repeat insertion and extraction of test card at a rate of 400 to 600 times per hour, 5,000 cycles. using the eject mechanism.</p> <p>(Test card may be replaced with a new one every 1,000 times. May pause testing for up to 10 minutes every 100 cycles).</p> <p>Measured in accordance with XD-Picture Card Standard.</p> <p>以每小時400~600次頻率的測試卡反復做插拔測試 5,000 次.使用拔出機械裝置.</p> <p>(測試卡可由 1,000 次的新卡取代,可以每 100 次超過 10 分鐘后暫停測試)</p>		
3	<p>Contact Location Stability (端子接觸穩定性)</p> <p>XD-Picture Card :</p> <p>Confirm that the contacts stay in the card slot when a force of 5N is applied to the card in directions 3 and 4 in the figure below.</p> <p>Measured in accordance with XD-Picture Card Standard.</p> <p>確認卡片停留在卡槽時,以 5N 的力量並以下圖(3).(4)方向下測試其接觸阻抗.</p> 	<p>Contact Resistance : $\leq 140m\Omega$</p>	

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No	Items/項目	Test Conditions / 測試條件	Specifications/規格
4	Vibration test 震動測試	<p>4-1. SD Memory Card / Multi Media Card :</p> <p>Vibration Wave : Sine wave.(震動波形：正弦波) Mechanical frequency range(機械頻率範圍) 10...2000 Hz. Acceleration(加速度)：2 g。 Measured in accordance with IEC 512 part 2 and 4.</p> <p>4-2. Memory Stick Card :</p> <p>Vibration Wave : Sine wave.(震動波形：正弦波) Power spectrum density : 5 ~ 50Hz 4.1m²/s³ (頻率) 50 ~ 63Hz -36dB/Oct. 63 ~ 250Hz 0.29m²/s³ Overall effective value(重力加速度)：16.1m/s² (1.64G) Test time(測試時間)：1H Vibrate Memory Stick under above conditions. (在上述設定條件下進行 MS Card 振動測試。) Measured in accordance with Memory Stick test Standard.</p> <p>4-3.XD-Picture Card :</p> <p>Mate a test card, and at load current of 1mA DC, apply vibration to the connector in tree different mutually perpendicular directions, including the mating axis, at frequencies of 10,2000and10Hz and acceleration of 196 m/s² for 15 minutes per cycle,10 times per axis (total of 30 times). Note : This condition, while not dependent on cycling through 2000Hz,is being confirmed with JIS/IEC, etc., regarding the application time and other details. Vibration Wave : Sine wave. Measured in accordance with JIS C0040/1995 / IEC 60068-2-6/1995. 連接器與卡在插入狀態下依照 DC 1mA,每分 10~2000~10Hz 的頻率範圍來震動,加速度 196 m/s²接觸狀態下的震幅 1.5mm.3 個多邊垂直面 (x,y,z) 的任何一面 (含嵌合體之軸面) 震動波形：正弦波.</p>	<p>(1) SD Memory Card / Multi Media Card : Discontinuity(間斷性)：≦ 1μs After the test, Contact Resistance (測試後,接觸阻抗)：≦ 100mΩ</p> <p>(2) Memory Stick Card : Discontinuity(間斷性)：≦ 1μs After the test, Contact Resistance (測試後,接觸阻抗)：≦ 500mΩ</p> <p>(3)XD-Picture Card : Discontinuity(間斷性)：≦ 100μs Contact Resistance : ≦ 140mΩ</p> <p>(4) Should not have any flaw scratch and crushed (不能有任何裂痕、刮傷和變形)</p>

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No	Items/項目	Test Conditions / 測試條件	Specifications/規格
5	Shock test 沖擊測試	<p>5-1. Memory Stick Card :</p> <p>5-2-1. Impact(衝擊) : 200G, 3 ms</p> <p>5-2-2. Impact (衝擊) : 150G, 10 ms</p> <p>Apply above from three directions for three times each. Check the operation before and after the test. (X,Y,Z 三個軸,各軸上、下各做一次衝擊共 3 回. 在測試前、後檢查操作方式.)</p> <p>Measured in accordance with Memory Stick test Standard.</p> <p>5-2. SD Memory Card / Multi Media Card :</p> <p>Acceleration (加速度) : 5 g.</p> <p>Measured in accordance with SD Memory Card / Multi Media Card Test Standard.</p> <p>5-3. XD-Picture Card :</p> <p>Mate a test card, and at load current of 1mA DC, apply in six different mutually perpendicular directions, including the mating axis, at 1960 m/s² for three times each (total of 18 times)</p> <p>Shock Wave : half sine wave.</p> <p>Standard duration : 1ms.</p> <p>Measured in accordance with JIS C0041 / MIL-STD-202 method 213.</p> <p>配對一個測試卡片,承載的電流是 : 1mA DC.</p> <p>6 條不同方向的互助垂直線.</p> <p>包括交叉軸,每條線以 1960m/s²的頻率進行 3 次(共 18 次).</p> <p>沖擊波 : 半正弦波.</p> <p>標準時長 : 1ms.</p>	<p>(1) SD Memory Card / Multi Media Card : Discontinuity(間斷性) : $\leq 1\mu s$</p> <p>After the test, Contact Resistance (測試後,接觸阻抗) : $\leq 100m\Omega$</p> <p>(2) Memory Stick Card : Discontinuity(間斷性) : $\leq 1\mu s$</p> <p>After the test, Contact Resistance (測試後,接觸阻抗) : $\leq 500m\Omega$</p> <p>(3)XD-Picture Card : Discontinuity(間斷性) : $\leq 100\mu s$</p> <p>Contact Resistance : $\leq 140m\Omega$</p> <p>(4) Should not have any flaw scratch and crushed (不能有任何裂痕、刮傷和變形)</p>

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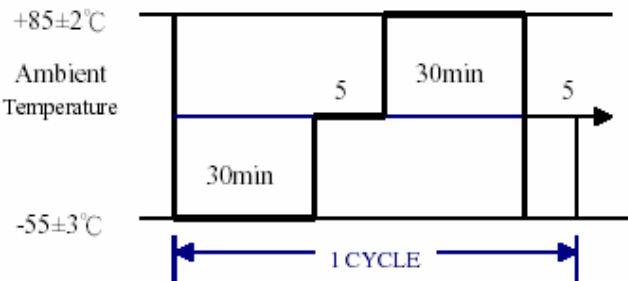
6-3. 環境特性 (Environmental performance)

No	Items/項目	Test Conditions / 測試條件	Specifications/規格
1	Heat resistance 熱阻抗	<p>1-1. Memory Stick Card :</p> <p>Temperature(溫度) : $100^{\circ}\text{C} \pm 2^{\circ}\text{C}$. Leave Memory Stick at above temperature for 48 hours or more. (放置至上述溫度為 48 小時以上) Measured in accordance with Memory Stick test Standard.</p> <p>1-2. SD Memory Card / Multi Media Card :</p> <p>The contact and card is exposed in the heat chamber 85°C for 500 hours. (在 85°C, 測試卡與連接器一起放置 500 小時.) Measured in accordance with Multi Media Card test Standard.</p> <p>1-3. XD-Picture Card :</p> <p>1-4-1. Mate a dummy card and expose to $85 \pm 2^{\circ}\text{C}$ for 250 hours. (在 $85 \pm 2^{\circ}\text{C}$ 的熱烤箱中, 讓連接器與卡暴露放置 250 小時.)</p> <p>1-4-2. Upon completion of the exposure period, condition at ambient room conditions for 1 to 2 hours. (在測試完成後, 曝曬一段時間. 放置於常溫 1~2 小時.) Measured in accordance with JIS C2021 / MIL-STD-202 method 108.</p>	<p>(a) After the test, Contact Resistance (測試後, 接觸阻抗) : SD Memory Card / Multi Media Card : $\leq 100\text{m}\Omega$ Memory Stick Card : $\leq 500\text{m}\Omega$ XD-Picture Card : $\leq 140\text{m}\Omega$</p> <p>(b) Function and performance shall be as specified. Not to change for physical appearance. (功能和外觀須正常, 不得有任何損壞)</p>

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2	Cold resistance 冷阻抗	<p>2-1. Memory Stick Card :</p> <p>Temperature(溫度) : $-40^{\circ}\text{C}\pm 3^{\circ}\text{C}$. Leave Memory Stick at this temperature for 48 hours or more. (放置至上述溫度為 48 小時以上) Measured in accordance with Memory Stick test Standard.</p> <p>2-2. SD Memory Card / Multi Media Card :</p> <p>The contact and card is exposed in the cold chamber -40°C for 168 hours. (在-40°C,測試卡與連接器一起放置 168 小時.) Measured in accordance with Multi Media Card test Standard.</p> <p>2-3. XD-Picture Card :</p> <p>2-3-1. Mate a dummy card and expose to $-55\pm 3^{\circ}\text{C}$ for 96 hours. (在$-55\pm 3^{\circ}\text{C}$的冷氣房中,讓連接器與卡暴露放置 96 小時.)</p> <p>2-3-2. Upon completion of the exposure period, condition at ambient room conditions for 1 to 2 hours. (在測試完成後,曝曬一段時間.放置於常溫 1~2 小時.) Measured in accordance with JIS C0020.</p> <p>2-4. It shall be measured the contact resistance after the test.(在測試完成後,測量接觸阻抗.) Measured in accordance with JIS C0020.</p>	<p>(a)After the test, Contact Resistance (測試後,接觸阻抗) : SD Memory Card / Multi Media Card : $\leq 100\text{m}\Omega$ Memory Stick Card : $\leq 500\text{m}\Omega$ XD-Picture Card : $\leq 140\text{m}\Omega$</p> <p>(b)Function and performance shall be as specified. Not to change for physical appearance. (功能和外觀須正常,不得有任何損壞)</p>

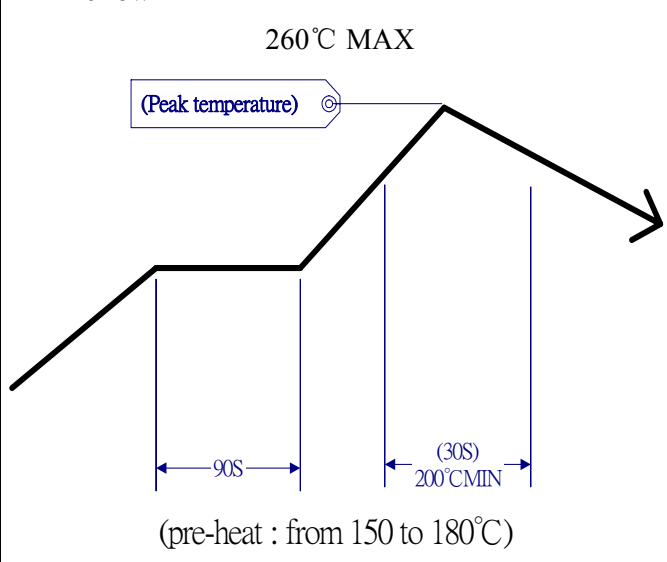
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No	Items/項目	Test Conditions / 測試條件	Specifications/規格
3	Thermal shock test 熱沖擊測試	<p>3-1. SD Memory Card / Multi Media Card :</p> <p>-55°C to +85°C. 5 cycles (1 cycles=1 hour) with connectors engaged. (測試卡與連接器測試 5 次,1 次=1 小時) Measured in accordance with IEC-512-6-11D.</p>  <p>3-2. Memory Stick Card :</p> <p>Leave Memory Stick at 80°C for an hour and then at -40°C for an hour. Repeat the cycle 25 times. (在 80°C,放置 1 小時,,在-40°C放置為 1 小時.重覆 25 個循環.) Measured in accordance with Memory Stick test Standard.</p> <p>3-3. XD-Picture Card :</p> <p>Mate a test card, and at load current of 1 mA DC, cycle temperature 5 times between -55±3°C (30 min. per cycle) and +85±2°C (30 min. per cycle), with transit time between temperatures of 3 minutes or less. Then condition at ambient room conditions for 1 to 2 hours. (電流 1 mA DC,通電 3 分鐘以上,溫度週期在 -55±3°C. +85±2°C,共測試 5 個循環(每個循環 30 分鐘),並常溫放置 1 至 2 小時.) Measured in accordance with JIS C0025.</p>	<p>(a)After the test, Contact Resistance (測試後,接觸阻抗) :</p> <p>SD Memory Card / Multi Media Card : $\leq 100m\Omega$ Memory Stick Card : $\leq 500m\Omega$ XD-Picture Card : $\leq 140m\Omega$</p> <p>(b)Function and performance shall be as specified. Not to change for physical appearance. (功能和外觀須正常,不得有任何損壞)</p>

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4	Humidity resistance (cycles) 溫濕度阻抗 (循環)	<p>4-1. Memory Stick Card / SD Memory Card / Multi Media Card :</p> <p>Leave Memory Stick at a temperature of 65°C and a humidity of 80% for 48hours or more. (放置在溫度 65°C,濕度 80%, 48 小時以上.)</p> <p>Measured in accordance with Memory Stick test Standard.</p> <p>4-3. xD-Picture Card Humidity(溫濕度測試條件) :</p> <p>Mate a test card, and after leaving in an environment of 60±2°C, RH90 to 95% for 96 hours, remove the card and condition at ambient room conditions for 1 to 2 hours.</p> <p>Then inspect appearance and measure contact resistance and insulation resistance. (放置在 60±2°C,相對濕度 90 至 95% ,96 小時後,移除卡片並放在常溫 1~2 小時後,檢查外觀和量測接觸阻抗和絕緣阻抗.)</p> <p>Measured in accordance with JIS C0022/MIL-STD-202 test method 103)</p>	<p>(1) After the test, Contact Resistance (測試後,接觸阻抗) :</p> <p>SD Memory Card / Multi Media Card : $\cong 100m\Omega$ Memory Stick Card : $\cong 500m\Omega$ XD-Picture Card : $\cong 140m\Omega$</p> <p>(2) Should not have any flaw scratch and crushed (不能有任何裂痕、刮傷和變形)</p>	
5	Temperature Rise (升溫測試)	<p>XD-Picture Card :</p> <p>Rating electric current on all pins and measure temperature rise of connector when mate the connector And daisy Chain Card.</p> <p>Measured in accordance with UL498.</p> <p>嵌入測試卡時,向所有 PIN 提供額定電流,測量 Connector 的溫度升高.</p>	<p>Max Temperature Rise (最大升溫高度) : +30°C Max</p>	

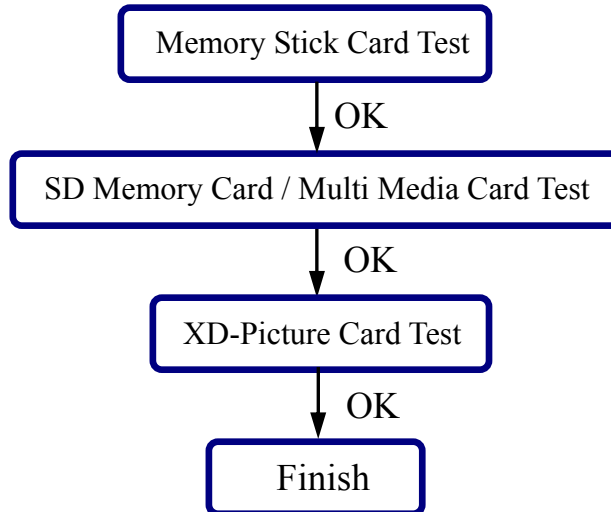
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6-4. 其他特性(Other performance)

No	Items/項目	Test Conditions / 測試條件	Specifications/規格
1	Solder ability 沾錫性	The contact of terminal shall be put into the flux and dipped solder bath $260\pm 5^{\circ}\text{C}$, 3 ± 0.5 sec. 端子浸入錫爐($260\pm 5^{\circ}\text{C}$, 3 ± 0.5 sec)沾錫. Measured in accordance with MIL-STD-202.	Solder shall be covered 95% or more of the area that is dipped into the solder bath (沾錫面積須在 95%(含)以上.)
2	Resistance to soldering heat 焊錫耐熱性	The contact of terminal shall be tested resistance to soldering heat in the following conditions. 端子應在下列條件下做耐吃錫性試驗. In case of solder iron (2 time) Temperature: $+350^{\circ}\text{C} \pm 5^{\circ}\text{C}$ Time: $5\text{s} \pm 1\text{s}$ 電烙鐵(兩次) 溫度: $+350^{\circ}\text{C} \pm 10^{\circ}\text{C}$ 時間: $5\text{s} \pm 1\text{s}$ The temperature shall be measured on the surface of the PCB. (量測 PCB 表面溫度)	Should not have any flaw scratch and crack. (無任何裂痕、刮傷和破裂)
3.	In IR-reflow (焊錫回流焊耐熱性)	In IR-reflow :  <p>(pre-heat : from 150 to 180°C)</p>	(1) Should not have any flaw scratch and crack (無任何裂痕、刮傷和破裂) (2) No visual damage to insulator. (絕緣體不得有嚴重變形)

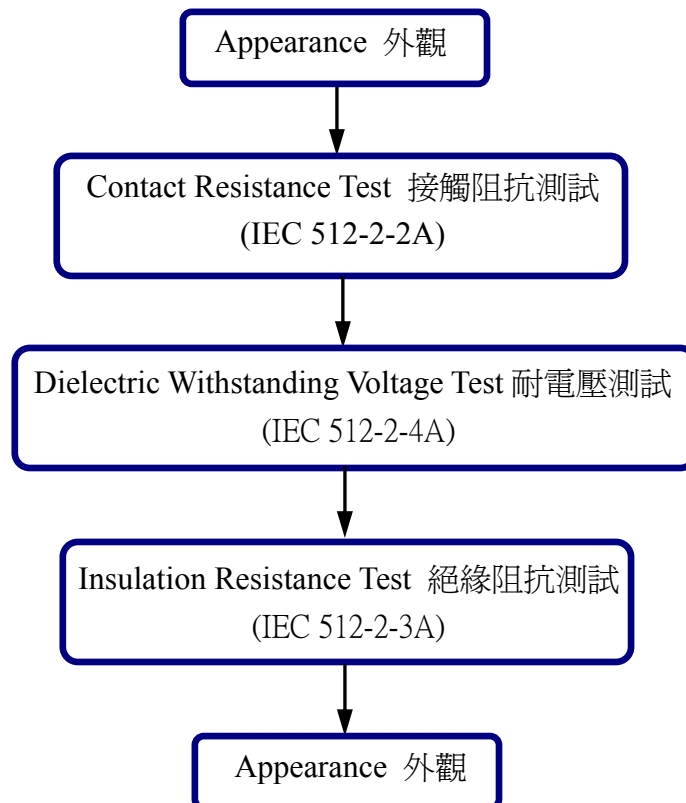
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7. Test Sequences 測試順序



8. Performance Flow Chart 特性流程圖：

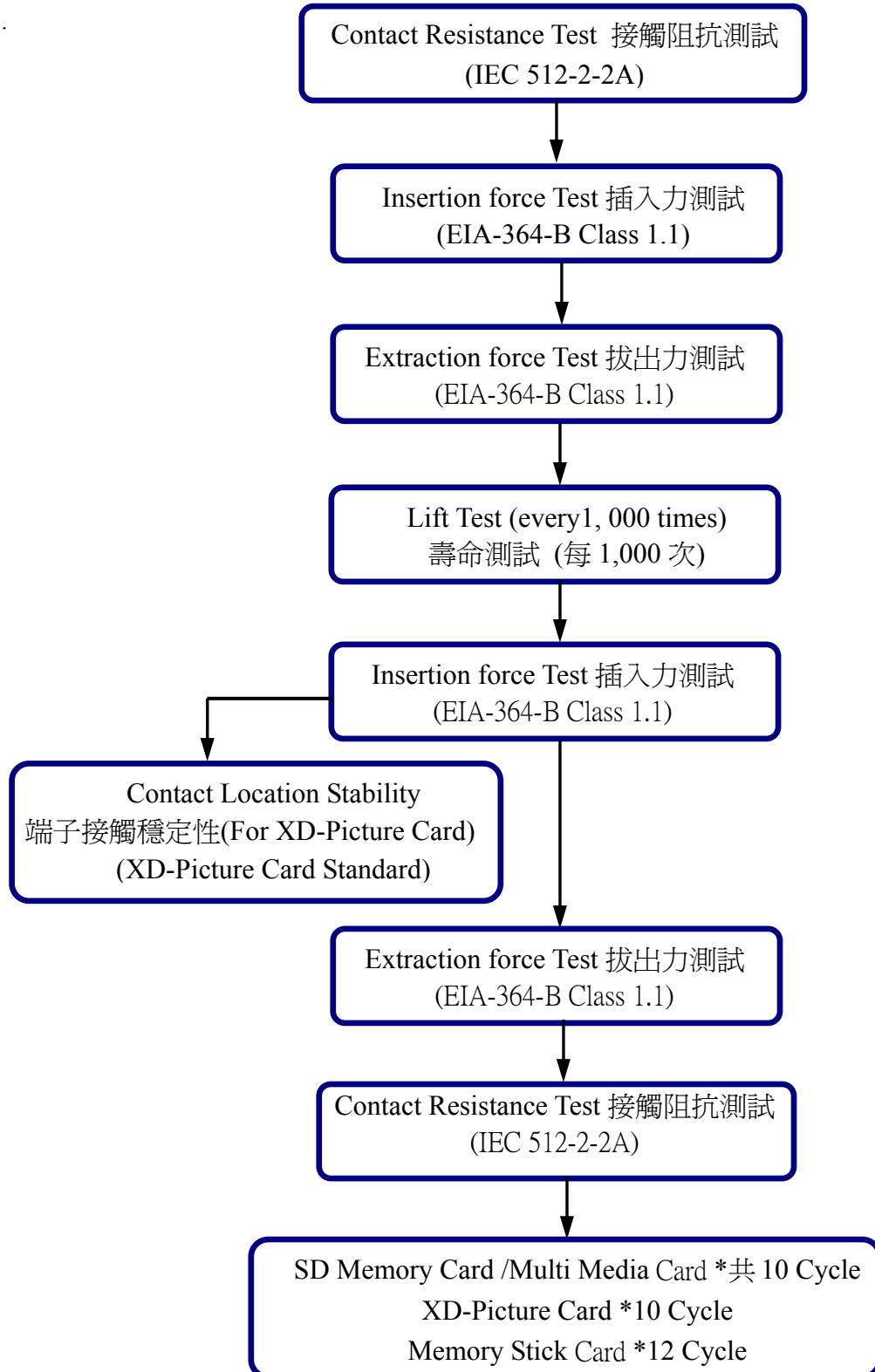
8.1. Electronics performance (電氣特性)



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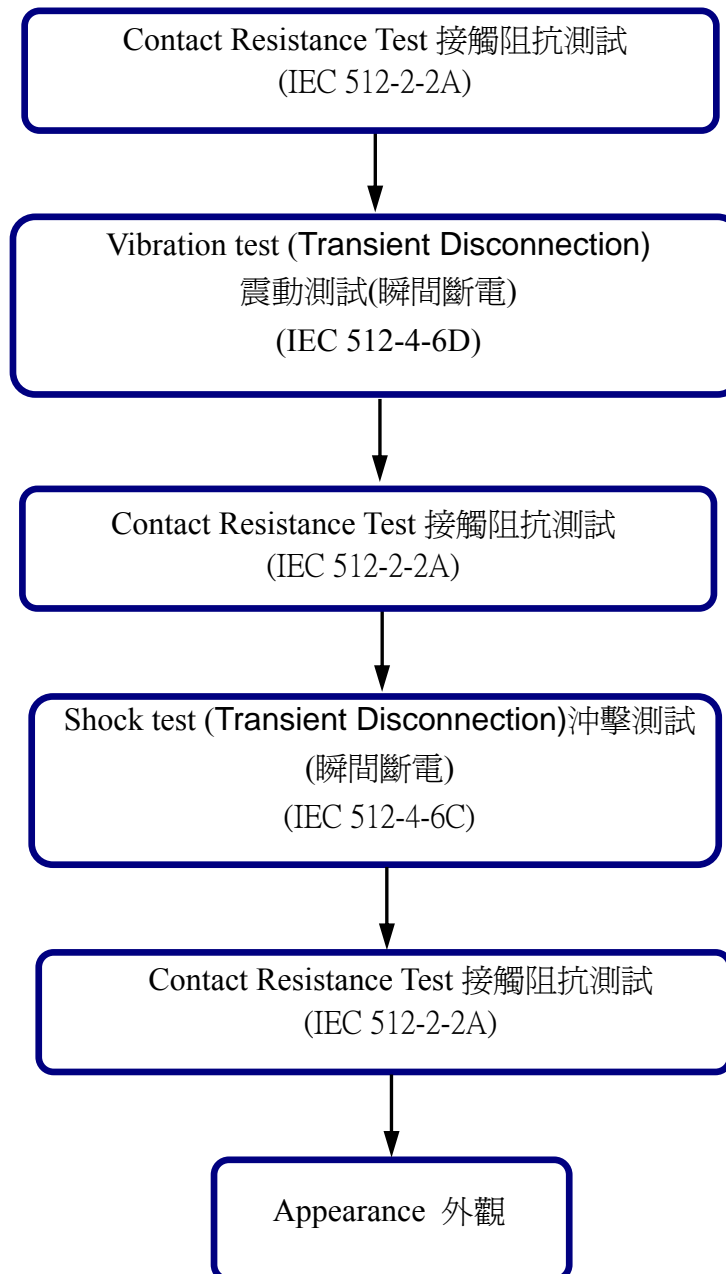
8.2.Functional performance (機械特性)

8.2.1.



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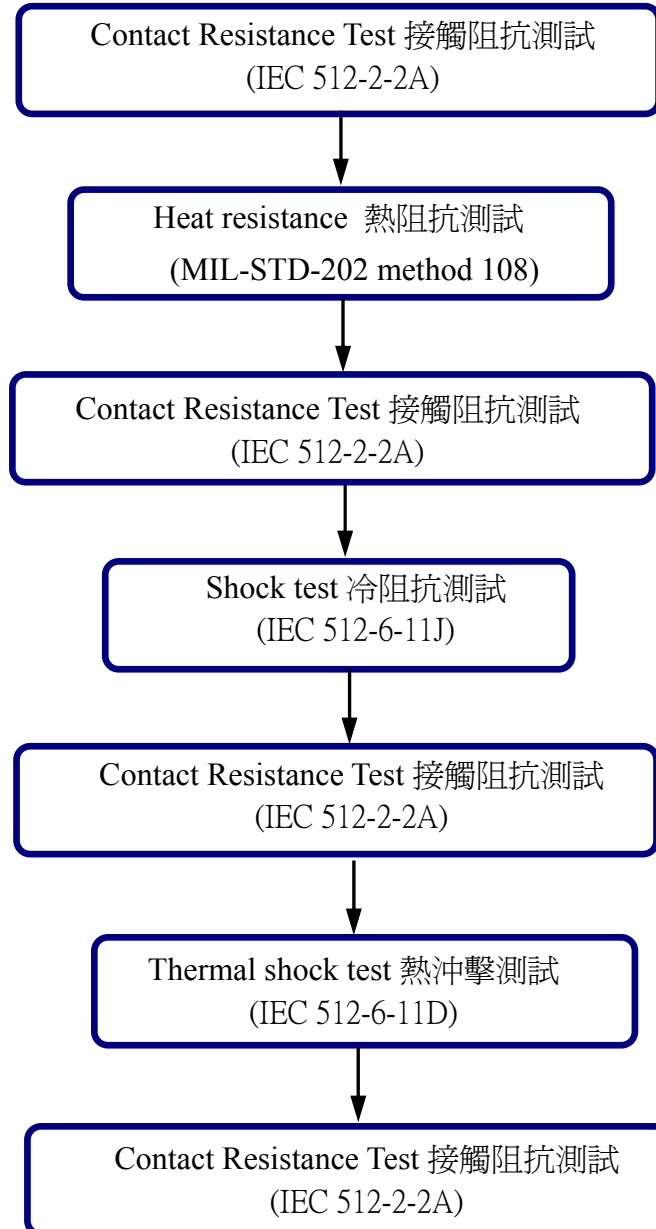
8.2-2.



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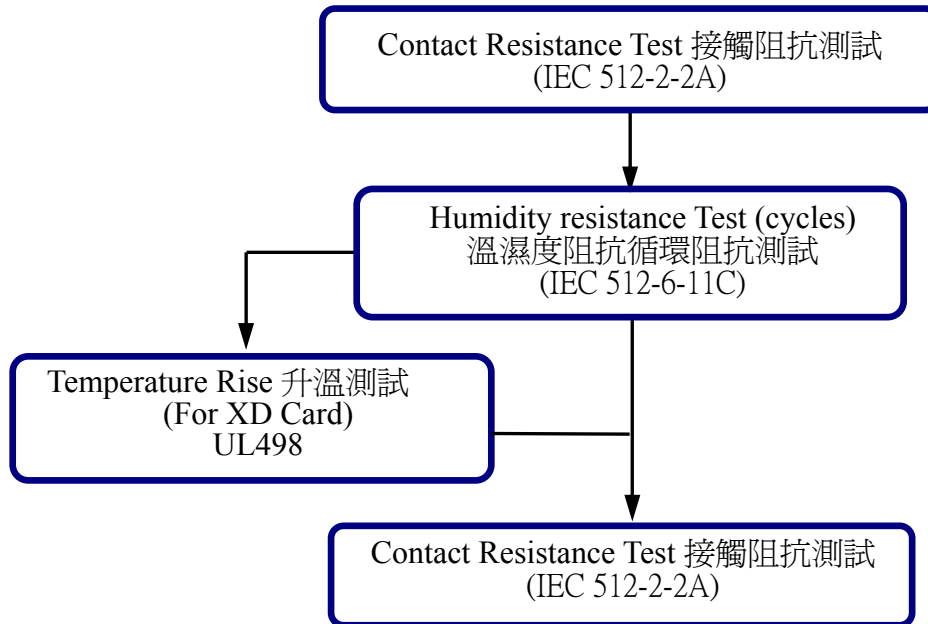
8.3. Environmental performance (環境特性) :

8.3.1.



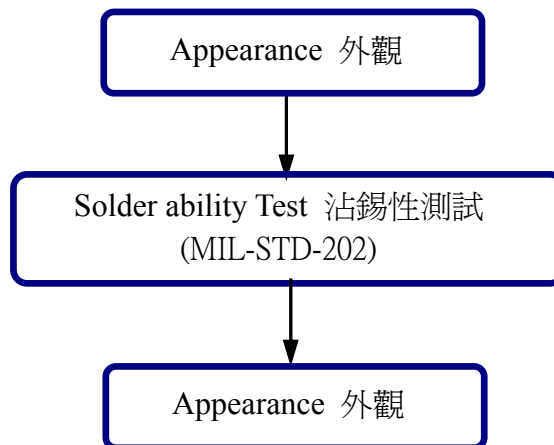
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8.3.2.



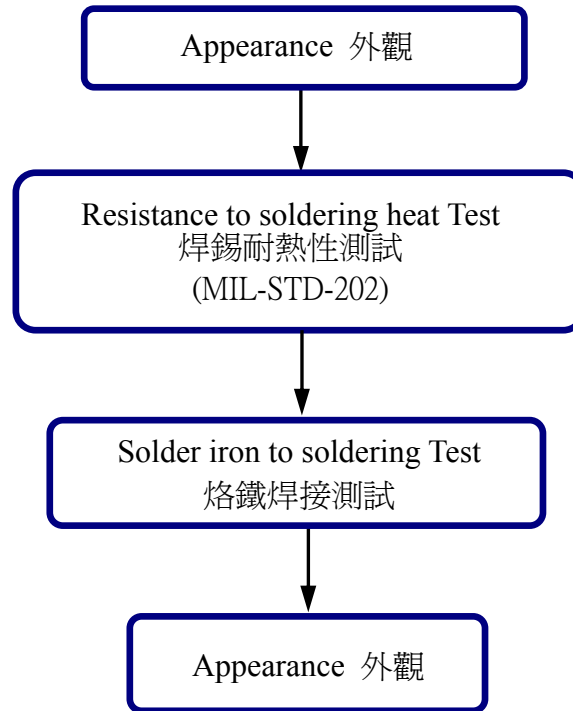
8.4. Other performance (其他特性) :

8.4.1.



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8.4.2.



Note :

- 1、 Insertion / Extraction Endurance Test : Repeat insertion and extraction of test card at a rate of 400 to 600 times per hour.(插拔耐久測試：每小時 400~600 次)**
- 2、 Performance Test : Insert and extract a test card at a speed of 25mm per Minute.
(特性測試：25mm/min 速度)**