



Part No.	YY-1100	<b>PRODUCT SPECIFICATION</b>	Document No.		SP1100-A	
Title	2.00mm(.097)Pitch Wire to Board Connector		Rev.	A0	Page	1 of 5

### 1. Applicable Standards

MIL-STD-202	Methods for test of connectors for electronic equipment
MIL-STD-1344	Test methods for electrical connectors
J-STD-020	Resistance to soldering temperature for through hole mounted devices
SS-00254	Test methods for electronic components , Lead-Free soldering part design standards

### 2. Product & Part Number

Product Name	Product Number
Housing	YY-1100-H
Header	YY-1100-WS ; YY-1100-WR YY-1100-SS ; YY-1100-SR
Terminal	YY-1100-T

### 3. Material

Product Name	Material
Housing	Nylon 66 UL94-V0
Header	Nylon 66 UL94-V0 ; High Temperature Plastic UL94-V0 ; Brass ; Tin-plated, Gold-plated
Terminal	Brass ; Tin-plated Phosphor Bronze ; Tin-plated

### 4. Shape, Construction and Dimensions

See attached drawings

Created	Checked	Approved	Date
Frank	Denise	Jessica	2011/10/25



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## 5. Electrical Performance

	ITEM	TEST CONDITION	REQUIREMENT
5-1	Rated current and Voltage 最大容許電壓		2A , 100V AC,DC
5-2	Contact Resistance 接觸組抗	Dry circuit of 20mV Max., 100mA 組合狀態下連接器,於其兩端施以最大電壓 20mV 以及最大電流 100mA	20mΩ Max. 最大值
5-3	Dielectric Strength 耐電壓	When applied AC 800V 1minute between adjacent terminal 組合狀態下連接器,於其相鄰兩導體末端各施以 800V AC(實效值)時間 1 分鐘	No Breakdown 沒有損壞
5-4	Insulation Resistance 絕緣組抗	When applied DC 500 V between adjacent terminal or ground 組合狀態下連接器,對相鄰兩接觸導體,各施以 500V DC 電壓量測其間絕緣阻抗值	1000 MΩ Min. 最小值

## 6. Mechanical Performance

	ITEM	TEST CONDITION	REQUIREMENT	
6-1	Wire size 適用的線材規格	Specified wire size 線材規格清單	Accepts AWG#24~#30 適合範圍	
6-2	Crimping Pull Out Force 壓鑄端子拔出力	Fix the crimped terminal , apply axial pull out force on the wire at the speed rate of 25±3mm/minute 固定壓鑄端子,用軸向的力量拔出電線以每分鐘 25±3 mm 的速率	AWG#24	3.0Kgf Min.
			AWG#26	1.8Kgf Min.
			AWG#28	1.1Kgf Min.
			AWG#30	0.6Kgf Min.
6-3	Terminal/Housing Insertion Force 端子插入力	Insertion speed 25±3mm/minute into housing 壓鑄端子插入 Housing 以每分鐘 25±3 mm 的速率	0.6Kgf Max. 最大值	
6-4	Terminal/Housing Retention Force	Apply axial pull out force at the speed rate of 25±3 mm/minute on the terminal assembled in the housing	1.5Kgf Min. 最小值	



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	端子/Housing 保持力	用軸向的力量拔出組裝在 Housing 裡的端子以每分鐘 25±3 mm 的速率					
6-5	Single Contact Insertion Force 單 pin 插入力	Measure force to insertion using mating square pin at speed 25±3 mm/minute 量測 Terminal 和四方 pin 插入之力量.每分鐘 25±3 mm 的速率			0.7Kgf Max. 插入力(最大值)		
6-6	Single Contact Withdrawal Force 單 pin 拔出力	Measure force to withdrawal using mating square pin at speed 25±3 mm/minute 量測 Terminal 和四方 pin 拔出之力量.每分鐘 25±3 mm 的速率			0.1Kgf Min. 拔出力(最小值)		
6-7	Durability 耐久性	When mated up to 100 cycles by the rate of 10 cycles per min. 插入拔出 100 循環,以一分鐘 10 循環的速率			Contact resistance: 接觸組抗 Less than twice of initial		
6-8	Pin Retention Force 針保持力	Apply axial push force at the speed rate of 25±3mm/minute 以每分鐘 25±3 mm 的速率從塑膠將 PIN 針頂出.			1.0Kgf Min. (最小值)		

## 7. Environmental Performance

	ITEM	TEST CONDITION	REQUIREMENT
7-1	Temperature rise 溫度上升	Then carried the rated current 組合狀態下連接器,最大容許電流通電,量測連接器的上升溫度	30°C Max. 最大值
7-2	Vibration 耐震動性	1.5 mm 10-55-10 HZ/ minute each 2 hours for X , Y and Z directions 振幅/頻率/持續時間	Appearance:No Damage 外觀沒有損壞 Discontinuity: 電流中斷 1 micro seconds Max.
7-3	Humidity 耐濕性	溫度 40±2°C , 相對溼度 90-95%RH , 持續時間 96 hours Measurement must be taken within 30 min. after tested	Contact resistance: 接觸組抗 Less than twice of initial Appearance:No Damage 外觀沒有損壞 Dielectric strength: 耐電壓 To pass para.5-3



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				滿足 5-3		
7-4	Salt spray 鹽水噴霧	Temperature:35±3°C Solution:5±1°C Spray time:48±4 hours Measurement must be taken after water rinse 曝露在鹽水噴霧下 48±4 小時 5+1%鹽水溶液 溫度 35± 3°C	Contact resistance: Less than twice of initial Appearance:No Damage 接觸組抗 外觀沒有損壞			
7-5	Temperature cycling 溫度循環	One cycle consists of: (1)-55 <sup>+0</sup> <sub>-3</sub> °C , 30 min. (2)Room temp. 10-15 min. (3) 85 <sup>+3</sup> <sub>-0</sub> °C , 30 min. (4)Room temp. 10-15 min. -55 °C 溫度持續 30 分鐘.室溫持續 5 分鐘 ++85°C 溫度持續 30 分鐘.室溫持續 5 分鐘 為一循環 需做 25 循環	Contact resistance: Less than twice of initial Appearance:No Damage 接觸組抗 外觀沒有損壞			
7-6	Solder ability 焊錫性	<b>Tin-Lead Process:</b> Soldering Time:5±0.5 second 時間 Solder Temperature: 230±5°C 溫度 <b>Lead-Free Process:</b> Soldering Time:3±0.5 second 時間 Solder Temperature: 245±5°C 溫度	Minimum: 90% of immersed area 吃錫面積			
7-7	Resistance to Solder Heat 焊錫耐熱性	<b>Tin-Lead Process:</b> Soldering Time: 5±0.5 second 時間 Solder Temperature: 245±5°C 溫度 <b>Lead-Free Process:</b> Soldering Time: 5±0.5 second 時間 Solder Temperature: 260±5°C 溫度 <b>SMT Type Tin-Free Process :</b> Refer Reflow temperature profile (9.1) <b>SMT Type Lead-Free Process :</b> Soldering Time: 20 second Max. 時間 Solder Temperature: 250~260°C 溫度 Refer Reflow temperature profile (9.2)	No Damage 沒有損壞			
7-8	Heat Resistance 耐熱性	85± 2 °C , 96hrs. 組合連接器放置於烤箱中,進行高溫老化 試驗	No Damage 外觀沒有損壞			



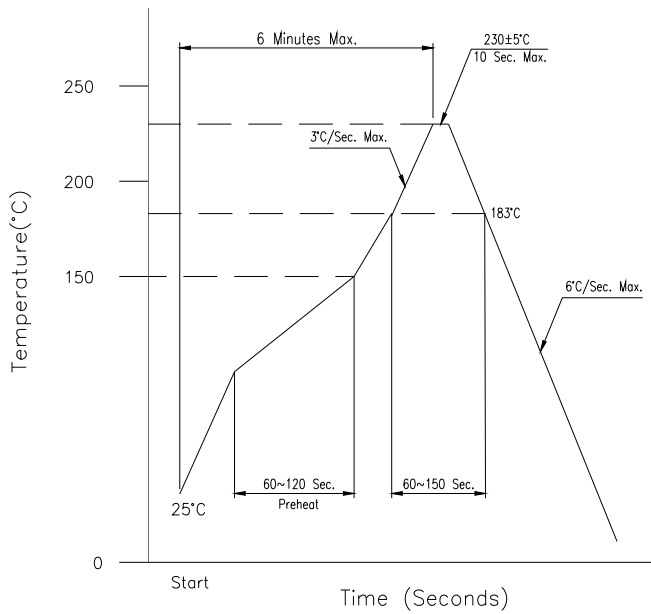
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### 8. Operating Temperature : -25 to +105°C

環境溫度

### 9. Recommended IR Reflow Temperature Profile: IR 波峰焊曲線圖

#### 9.1 Using Typical Solder Paste



#### 9.2 Using Lead-Free Solder Paste

