



Part No.	YY-1820* Series	<b>PRO DUCT SPECIFICATION</b>	Document No.	SP-YY1820	
Title	2.54mm(.100") Pitch Wire to Board Connector		Rev.	A0	Page 1 of 4

### 1. Scope

This specification covers the 2.54mm pitch Wire to Board Connector series.

### 2. Product & Part Number

Product Name	Product Number
Housing	YY-1820-H* & YY-1820D-H*
Terminal	YY-1820-T*
Wafer	YY-1820-W*

### 3. Material

Product Name	Material	
Housing	PBT UL94-V0	
Terminal	Phosphor Bronze ; Brass	
Wafer	Body	PBT UL94-V0
	Pin	Brass

### 4. Shape, Construction and Dimensions

See attached drawings

Created	Checked	Approved	Date
Lee	David	Denise	2013/04/10



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### 5. Electrical Performance

	ITEM	TEST CONDITION	REQUIREMENT
5-1	Rated current and Voltage 最大容許電壓		3A , 250V AC/DC
5-2	Contact Resistance 接觸組抗	Mate connectors ,measure by dry circuit 20mV Max., 100mA Max. (EIA 364-23) 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. Initial 最大值
5-3	Insulation Resistance 絕緣組抗	Mate connectors , apply 500V DC between adjacent terminal or ground. (EIA 364-21) 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. Initial 最小值
5-4	Dielectric Strength 耐電壓	Mate connectors , applied 1000V AC(rms) 1 minute between adjacent terminal or ground. (EIA 364-20) 組合狀態下連接器,於其相鄰兩導體末端各施以 1000V AC(實效值)時間 1 分鐘	No Breakdown 沒有損壞

### 6. Mechanical Performance

	ITEM	TEST CONDITION	REQUIREMENT	
6-1	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 pin 針插入之力量.每分鐘 25±3 mm 的速率	0.45 kgf Max. 插入力(最大值)	
6-2	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	0.07 kgf Min. 拔出力(最小值)	
6-3	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 ± 3 mm/minute. (JIS C5402 6.8)	AWG #24	3.0 Kgf Min.
			AWG #26	1.8 Kgf Min.
			AWG #28	1.1 Kgf Min.



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		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				
6-4	Terminal Insertion Force 端子插入力	Insertion the crimped terminal into the housing. 壓鑄端子插入 Housing 以每分鐘 25±3 mm 的速率		1.3 Kgf Max. 最大值		
6-5	Terminal/Housing Retention Force 端子/Housing 保持力	Apply axial pull out force at the speed rate of 25 ± 3 mm/minute on the terminal assembled in the housing. 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		2.0 Kgf Min. 最小值		

## 7. Environmental Performance and Others

	ITEM	TEST CONDITION	REQUIREMENT
7-1	Durability 耐久性	When mated up to 30 cycles repeatedly by the rate of 10 cycles per minute. 插入拔出 100 循環,以一分鐘 10 循環的速率	Contact resistance : 接觸組抗 40mΩ Max.
7-2	Temperature Rise 溫度上升	Carrying rated current load. (UL498) 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
7-3	Vibration 耐震動性	Amplitude : 1.5mm P-P Sweep time : 10~55~10 HZ in 1 minute Duration : 2 hours in each X , Y , Z axes (EIA 364-28A-83 Condition III) 振幅/頻率/持續時間	Contact resistance : 40mΩ Max. Appearance : No Damage 外觀沒有損壞 Discontinuity : 電流中斷 1.0 microsecond Max.
7-4	Heat Resistance 耐熱性	85 ± 2°C , 96 hours. (EIA 364-17B) 組合連接器放置於烤箱中,進行高溫老化試驗	Contact resistance : 40mΩ Max. Appearance : No Damage 外觀沒有損壞



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7-5	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 40mΩ Max. Appearance : No Damage 外觀沒有損壞 Dielectric Strength : 耐電壓 To pass para.5-4			
7-6	Temperature Cycling 溫度循環	25 cycle consists of : (1)-55 °C , 30 minutes →Room Temp. 5minutes (2)+85°C , 30 minutes →Room Temp. 5minutes (EIA 364-32) -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 爲一循環 需做 25 循環		Contact resistance : 40mΩ Max. Appearance : No Damage Dielectric Strength : To pass para.5-4 接觸組抗 外觀沒有損壞			
7-7	Salt Spray 鹽水噴霧	48 ± 4 hours exposure to a salt spray from the 5 + 1% solution at 35 ± 2°C (EIA 364-26) 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 : 40mΩ Max. Appearance : No Damage 接觸組抗 外觀沒有損壞			
7-8	Solder ability 焊錫性	Soldering Time : 3 ± 0.5 sec. 時間 Solder Temperature : 235 ± 5°C 溫度		Minimum : 95% of immersed area. 吃錫面積			
7-9	Resistance to Soldering Heat	Dip connector terminal tails in solder Soldering Time : 5 ± 0.5 sec. 時間 Solder Temperature : 235 ± 5°C 溫度		No Damage. 沒有損壞			

8. Operating Temperature : -40 to + 105°C

環境溫度