



Part No.	YY-2500	PRODUCT SPECIFICATION	Document No.		SP2500-01	
Title	3.96mm(.156)Pitch Wire to Board Connector		Rev.	A0	Page	1 of 4

1. Applicable Standards

MIL-STD-202 Methods for test of connectors for electronic equipment

MIL-STD-1344 Test methods for electrical connectors

2. Product & Part Number

Product Name	Product Number
Housing	YY-2500-H
Header	YY-2500-WS ; YY-2500-WR
Terminal	YY-2500-T

3. Material

Product Name	Material
Housing	Nylon 66 UL94-V2
Header	Nylon 66 UL94-V2 , Nylon 66 UL94-V0
	Brass ; Tin-plated , Gold-plated
Terminal	Brass ; Tin-plated , Gold-plated
	Phosphor Bronze ; Tin-plated , Gold-plated

4. Shape, Construction and Dimensions

See attached drawings

Created	Checked	Approved	Date
Frank	Denise	Jessica	2011/11/07



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5. Electrical Performance

	ITEM	TEST CONDITION	REQUIREMENT	
5-1	Rated current and Voltage 最大容許電壓		Brass	5A Max. 250V AC
			Phosphor Bronze	7A Max. 250V AC
5-2	Contact Resistance 接觸組抗	Dry circuit of 20mV Max., 100mA Max. 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	10mΩ Max. 最大值	
5-3	Dielectric Strength 耐電壓	When applied AC 1000V 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#18~#24 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#18	9.0KgfMin.
			AWG#20	7.0KgfMin.
			AWG#22	5.0KgfMin.
			AWG#24	3.5KgfMin.
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	1.8Kgf Max. 最大值	



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6-4	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	3.0Kgf Min. 最小值			
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 pin 針插入之力量.每分鐘 25±3 mm 的速率	1.0Kgf 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	0.15Kgf Min. 拔出力(最小值)			
6-7	Durability 耐久性	When mated up to 30 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.	2.5Kgf 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	Contact resistance: Less than twice of initial 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



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			外觀沒有損壞 Dielectric strength: 耐電壓 To pass para.5-3 滿足 5-3	
7-4	Salt spray 鹽水噴霧	Temperature:35±2°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 ± 3 °C , 30 min. (2)Room temp. 10-15 min. (3) 85 ± 2 °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	Tin-Lead Process: Soldering Time:5±0.5 second 時間 Solder Temperature: 230±5°C 溫度 Lead-Free Process: 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	Tin-Lead Process: Soldering Time: 5±0.5 second 時間 Solder Temperature: 245±5°C 溫度 Lead-Free Process: Soldering Time: 5±0.5 second 時間 Solder Temperature: 260±5°C 溫度	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	

8. Operating Temperature : -25 to + 85°C

環境溫度