



Part No.	YY-5700	PRODUCT SPECIFICATION	Document NO.	SP5700-02	
Title	4.2mm(.165") Pitch Wire to Board Connector(Single Row)		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-5700-HS
Housing	YY-5800-HS
Terminal	YY-5700-T ; YY-5700-T
Header	YY-5900-WRS&WSS

3. Material

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

4. Shape, Construction and Dimensions

See attached drawings

Created	Checked	Approved	Date
Frank	Denise	Jessica	2011/11/16



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5. Electrical Performance

	ITEM	TEST CONDITION	REQUIREMENT	
5-1	Rated Voltage (Max.)		600V AC (r.m.s.)	
	Rated Current and Applicable Wire	Wire Gage / Circuits	3	4, 5
		AWG #16 ~ #18	9A	8A
		AWG #20	7A	6A
		AWG #22	5A	4A
		AWG #24	4A	3A
		AWG #26	3A	2A
5-2	Contact Resistance	Dry circuit of DC 20mV Max. , 100mA Max. , Wire resistance shall be removed from the measured value	10mΩ Max.	
5-3	Dielectric Strength	When applied AC 1500V 1minute between adjacent terminal	No Change	
5-4	Insulation Resistance	When applied DC 500 V between adjacent terminal or ground	1000MΩ Min.	

6. Mechanical Performance

	ITEM	TEST CONDITION	REQUIREMENT	
6-1	Wire size	Specified wire size	Accepts AWG#16~#26	
6-2	Crimping Pull Out Force	Fix the crimped terminal , apply axial pull out force on the wire at the speed rate of 25±3mm/minute	AWG#16	11.0KgfMin.
			AWG#18	9.0KgfMin.
			AWG#20	7.0KgfMin.
			AWG#22	5.0KgfMin.
			AWG#24	3.0KgfMin.
			AWG#26	2.0KgfMin.
6-3	Terminal Insertion Force	Insertion speed 25±3mm/minute into housing	1.5Kgf Max.	



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	ITEM	TEST CONDITION	REQUIREMENT
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	5.0Kgf Min.
6-5	Single Contact Insertion Force	Measure force to insertion using mating square pin at speed 25±3 mm/minute	0.7Kgf Max.
6-6	Single Contact Withdrawal Force	Measure force to withdrawal using mating square pin at speed 25±3 mm/minute	0.1Kgf Min.
6-7	Durability	Connector shall be subjected to 100 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial
6-8	Pin Retention Force	Apply axial push force at the speed rate of 25±3mm/minute	1.0Kgf Min.
6-9	Locking Force	While with drawing plug & receptacle without terminal at speed 25±3 mm/minute	1.5Kgf Min.

7. Environmental Performance

	ITEM	TEST CONDITION	REQUIREMENT
7-1	Temperature rise	Then carried the rated current	30°C Max.
7-2	Vibration	1.5 mm 10-55-10 HZ/ minute each 2 hours for X , Y and Z directions	Appearance: No Damage Discontinuity: 1 micro second Max.
7-3	Solder ability	Tin-Lead Process: Soldering Time:5±0.5 second Solder Temperature: 230±5°C Lead-Free Process: Soldering Time:3±0.5 second Solder Temperature: 245±5°C	Minimum: 90% of immersed area
7-4	Resistance to soldering heat	Tin-Lead Process: Soldering Time: 5±0.5 second Solder Temperature: 245±5°C Lead-Free Process: Soldering Time: 5±0.5 second Solder Temperature: 260±5°C	No Damage
7-5	Heat aging	105±2°C , 96 hours (UL 94-V0)	No Damage



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	ITEM	TEST CONDITION	REQUIREMENT
7-6	Humidity	40±2°C , 90-95%RH , 96 hours measurement must be taken within 30 min. after tested	Appearance: No damage Contact resistance: Less than twice of initial Dielectric strength: To pass para. 5-3
7-7	Temperature cycling	One cycle consists of (UL 94-V0): (1)-40 ⁺⁰ ₋₃ °C , 30 min. (2)Room temp. 10-15 min. (3)105 ⁺³ ₋₀ °C , 30 min. (4)Room temp. 10-15 min.	Appearance: No damage Contact resistance: Less than twice of initial
		One cycle consists of (UL 94-V2): (1)-25 ⁺⁰ ₋₃ °C , 30 min. (2)Room temp. 10-15 min. (3) 85 ⁺³ ₋₀ °C , 30 min. (4)Room temp. 10-15 min.	
7-8	Salt spray	Temperature: 35±3°C Solution: 5±1% Spray time: 48±4 hours Measurement must be taken after water rinse	Appearance: No damage Contact resistance: Less than twice of initial

8. Ambient Temperature Range: -40 to + 105°C (UL 94V-0)
-25 to + 85°C (UL 94V-2)

9. Mating Force And Unmating Force: Unit: kgf

Number of Circuits	Mating Force (Max.)	Unmating Force (Min.)
3	2.10	0.80
4	2.80	1.20
5	3.50	1.60



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Title	4.2mm(.165") Pitch Wire to Board Connector(Dual Row)		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

2. Product & Part Number

Product Name	Product Number
Housing	YY-5700-H
Housing	YY-5800-H
Terminal	YY-5700-T ; YY-5800-T
Header	YY-5900-WR&WS

3. Material

Product Name	Material	
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	ITEM	TEST CONDITION	REQUIREMENT				
5-1	Rated Voltage (Max.)		600V AC (r.m.s.)				
5-1	Rated Current and Applicable Wire	Wire Gage	Circuits	2	4~6	8~10	12~24
		AWG #16 ~ #18		9A	8A	7A	6A
		AWG #20		7A	6A	5A	5A
		AWG #22		5A	4A	4A	4A
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9. Mating Force And Unmating Force:

Unit: kgf



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9. Mating Force And Unmating Force:

Unit: kgf

Number of Circuits	Mating Force (Max.)	Unmating Force (Min.)
2	1.8	0.25
4	2.6	0.5
6	4.1	0.8
8	5.5	1.2
10	6.8	1.6
12	8.3	2.0
14	9.7	2.4
16	11.0	2.8
18	12.5	3.2
20	13.8	3.6
22	15.2	4.1
24	16.5	4.6