PRODUCT SPECIFICATION

PRODUCT SERIES NAME: B1502 SERIES | PAGE: 1/4

1.SCOPE:

This specification covers the requirements for product performance of 1.50mm pitch board-in connector series.

2.CONSTRUCTION、DIMENSIONS 、 MATERIAL & PLATING:

See the attached drawings

3.RATINGS & APPLICABLE WIRES:

Item	Standard		
Rated Voltage (max.)	200V AC, DC		Insulation O.D. 1.00mm (max.)
Rated Current (max.) and Applicable Wires	AWG #28	1A AC, DC	
	AWG #30	1A AC, DC	
Ambient Temperature Range	-25°C ~ +85°C*		

*: Including terminal temperature rise

4.PERFORMANCE:

4-1.ELECTRICAL PERFORMANCE

Test Description		Procedure	Requirement
4-1-1	Insulation Resistance	Apply 500V DC between adjacent terminal or ground (Based upon JIS C5402 5.2/MIL-STD-202 Method 302 Cond. B)	500MΩ min.
4-1-2	Dielectric Withstanding Voltage	Apply 500V AC (rms) for 1 minute between adjacent terminal or ground. (Based upon JIS C5402 5.1/ MIL-STD-202 Method 301)	No Breakdown
4-1-3	Contact Resistance on Crimped Portion	Crimp the applicable wire on to the terminal, measure by dry circuit, 20mV max., 10mA.	5mΩ max.

			APPROVED	CHECKED	WRITTEN
			BY	BY	BY
A1	REVISE	2007.06.26	Wu Yu Chun	Lui Can Zhu	Bo Bo Chu
A0	NEW RELEASE	2006.05.20			
REV.	DESCRIPTION	DATE	DOCUMENT NO: PS-1502-001		

PRODUCT SPECIFICATION

4-2.MECHANICAL PERFORMANCE

Test Description		Procedure		Requirement
4-2-1	Insertion & Withdrawal Force to P.C.B.	Insert and withdraw at the speed rate of 25 ± 3mm/minute to P.C.Board. (Per single circuit, Initial)	Insertion	1.0kgf max.
			Withdrawal	0.1kgf min.
4-2-2	Crimping Pull Out Force	Fix the crimped terminal, apply axial pull out force on the wire at the speed rate of 25 ± 3mm/minute. (Based upon JIS C5402 6.8)	AWG #28	1.0kgf min.
			AWG #30	0.8kgf min.
4-2-3	Terminal Insertion Force	Insert the crimped terminal into the housing.		0.5kgf max.
4-2-4	Terminal/ Housing Retention Force	Apply axial pull out force at the speed rate of 25 ± 3mm/minute on the terminal assembled in the housing.		0.7kgf min.
4-2-5	Vibration	Amplitude: 1.5mm P-P Sweep time: 10-55-10 Hz in 1 minute Duration: 2 hours in each X.Y.Z. axes (Based upon MIL-STD-202 Method 201A)	Appearance	No Damage
			Contact Resistance on Crimped Portion	10mΩ max.
			Discontinuity	1μsec. max.
4-2-6	Physical Shock	490m/s² {50G}, 3 strokes in each X.Y.Z. axes. (Based upon JIS C0041/MIL-STD-202 Method 213B Cond. A)	Appearance	No Damage
			Contact Resistance on Crimped Portion	10mΩ max.
			Discontinuity	1μsec. max.

PRODUCT SPECIFICATION

4-3.ENVIRONMENTAL PERFORMANCE AND OTHERS

Test Description		Procedure		Requirement
4-3-1	Temperature Rise	Carrying rated current load. (Based upon UL 498)	Temperature Rise	30°C max.
4-3-2	Heat Resistance	85 ± 2°C, 96 hours (Based upon JIS C0021/MIL-STD-202 Method 108A Cond. A)	Appearance	No Damage
			Contact Resistance on Crimped Portion	10mΩ max.
4-3-3	Cold Resistance	-25 ± 3°C, 96 hours (Based upon JIS C0020)	Appearance	No Damage
			Contact Resistance on Crimped Portion	10mΩ max.
4-3-4	Humidity	Temperature: 40 ± 2°C Relative Humidity: 90 ~ 95% Duration: 96 hours (Based upon JIS C0022/MIL-STD-202 Method 103B Cond. B)	Appearance	No Damage
			Contact Resistance on Crimped Portion	10mΩ max.
			Insulation Resistance	50MΩ min.
			Dielectric Withstanding Voltage	Must meet 4-1-2
4-3-5	Temperature Cycling	5 cycles of: a) - 55°C 30 minutes b) +85°C 30 minutes (Based upon JIS C0025)	Appearance	No Damage
			Contact Resistance on Crimped Portion	10mΩ max.
4-3-6	Salt Spray	24 ± 4 hours exposure to a salt spray from the 5 ± 1% solution at 35 ± 2°C. (Based upon JIS C0023/MIL-STD-202 Method 101D Cond. B)	Appearance	No Damage
			Contact Resistance on Crimped Portion	10mΩ max.
4-3-7	SO_2 Gas	24 hours exposure to 50 ± 5ppm. SO_2 gas at 40 ± 2°C.	Appearance	No Damage
			Contact Resistance on Crimped Portion	10mΩ max.

PRODUCT SPECIFICATION

Test Description		Procedure		Requirement
4-3-8	NH_3 Gas	40 minutes exposure to NH_3 gas evaporating from 28% Ammonia solution.	Appearance	No Damage
			Contact Resistance on Crimped Portion	10mΩ max.
4-3-9	Solderability	Soldering Time: 5 ± 0.5 sec. Solder Temperature: 245 ± 5°C	Solder Wetting	95% of immersed area must show no voids, pin holes
4-3-10	Resistance to Soldering Heat	<u>Solder pot method</u> Soldering Time: 10 ± 0.5 sec. Solder Temperature: 260 ± 5°C <u>Solder iron method</u> Soldering Time: 5 ± 0.5 sec. Solder Temperature: 370°C ~ 400°C	Appearance	No Damage