Product Specification	DATE	2012.12.24

PRODUCT NO: B2513 SERIES

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APPROVAL BY:	CHECK BY:	PREPARE BY:
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1.Scope:

This product specification contains the results that general performances of B2512 SERIES connector were examined.

2. Product Name/Part Numbers

Product Name	Part Numbe
Terminal	B2513-T
Housing	B2513-H

3.Construction/Dimensions/Material & Surface Finish

Product Name	Material	Surface Finish
Terminal	Brass	Tin over Nickel
	Phosphor Bronze	Tin over Nickel
Housing	Nylon 66	UL 94V-0

4. Characteristic:

Current Rating: 3A

Voltage Rating: 250V AC/DC

Temperature Range: -40℃~+105℃

5. Mechanical Performance：

Item	Test Condition		Requirement
Wire Pullout Force(Axial)	Pull out the cable from with contact terminal at the speed rate of 25 .4± 3 mm/minute	AWG#22 size wire	5.0kgf/Min
		AWG#24 size wire	3.0kgf/Min
		AWG#26 size wire	2.0kgf/Min
		AWG#28 size wire	1.3kgf/Min
Crimp Terminal Retention Force (in Housing)	Axial pullout force on the terminal in the housing at the speed rate of 25.4 ± 3 mm per minute.		Per Contact 1.5kgf/Min
Crimp Terminal Retention Force (into Housing)	Insert the crimped terminal into the housing,at the speed rate of 25.4 ± 3 mm per minute		Per Contact 0.5kgf/Min

6. Electrical Performance.

Item	Test Condition	Requirement
Contact Resistance on Crimped portion	Crimp the applicable wrie on to the terminal,Measure by dry ircuit,20mV Max,100mA	10 milliohms Max
Insulation Resistance	Apply 500V D/C for 1 minute between adjacent contacts to measure the insulation resistance.	Insulation Resistance: Intiial 1000 megohms Min
Withstanding Voltage	Apply 800V A/C (rms) for 1 minute and the leakage current shall not exceed 0.5mA to the adjacent terminal and ground of the housing	No breakdown or flashover.

	with terminated wires.	

7. Environmental Performance.

Item	Test Condition	Requirement
Temperature Rise (Via Current Cycling)	Mate connector measure the temperature rise of contact when the maximum rated current is passed	Mate connectors Temperature Rise: ＋30℃/Max.℃
Humidity (Steady State)	A housing connected with cable shall be placed in a humidity chamber of the following conditions. After the test, the contact resistance, the insulation resistance and the dielectric withstanding voltage shall be measured. Temperature: 40±2℃ Relative Humidity: 90%~95% (RH). Period:96 hours continuously.	(After the test) Contact Resistance on Crimped portion : 20 milliohms Max.
		(After the test) Insulation Resistance : 500 Megohms Min.
		(After the test) Withstanding Voltage: 800V A/C for 1 minute
Thermal Shock	A housing connected with cable shall be subjected to a thermal shock test of the following conditions. After the test, the contact resistance, the insulation resistance and the dielectric withstanding voltage shall be measured. One Cycle Consists Of: -55+0/-3℃ for 30 minutes. → Room Temp.5 minutes	The Same as above sheet

	85+3/-0℃ for 30 minutes. → Room Temp.5 minutes 85+3/-0℃ for 30 minutes. → Room Temp.5 minutes	
Thermal Aging	A housing connected with cable shall be placed in a heat oven of the following conditions. After the test, contact resistance shall be measured. Temperature: 85±2℃ Period :96 hours continuously	Initial Contact Resistance on Crimped portion : 10 milliohms Max. (After the test) Contact Resistance on Crimped portion : 20 milliohms Max.
Salt Spray	A housing connected with cable shall be subjected to a Salt Spray test of the following conditions. After the test ,the specimen shall be washed with running water and dried naturally before the measurement of contact resistance. Density: 5 % in weight Temperature: 35±2℃ Period:Terminal or contact (Stamping after tin plated for 8 hours);Terminal or contact (Stamping before tin plated for 48 hours	Initial Contact Resistance on Crimped portion : 10 milliohms Max. (After the test) Contact Resistance on Crimped portion : 20 milliohms Max.
	Fluxed soldering section of header shall be dipped in solder of the following conditions.	Solder entirely 95% of immersed area must show no voids or pinholes.

Solder Ability	Solder Temperature: 245 ± 5℃. Immersion Period: 3±0.5 Seconds Method : 1.5mm From Terminal Tip.	
Resistance To Soldering Heat	By Wave Soldering: Solder Temperature: 260 ± 5℃ Immersion Period:5±0.5 Second	No deformation or damage.
	By soldering iron: Solder Temperature: 350 ± 5℃ Immersion Period :3±0.5 Seconds℃ Method : 1.5mm From Terminal Tip	