

RELIABILITY TEST REPORT

TEST ITEM: 1.ELECTRICAL
2.MECHANICAL
3.ENVIRONMENTAL

SERIES NO.: CHWG Series

TEST EQUIPMENT: 1.INSERTION & REMOVAL APPARATUS
2.ELECTRONIC MEASURING APPARATUS
3.ENVIRONMENTAL APPARATUS

DATE OF TESTING: 11/28/06”

TEST DEPART: QA TESTER: Scott.Lien

CONTAIN: ATTACHED

SPEC.NO : SPCHWG1B

REVIEWED : Jackal APPROVED : Rita VERIFIED : Scott.Lien .



1.ELECTRICAL PERFORMANCE :

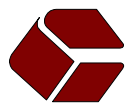
	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
1-1	Contact resistance	Dry circuit of DC 20 mV max.100 mA max.	Less than 20 mΩ	Sample	20 mΩ max.
				1	8.99 mΩ
				2	9.07 mΩ
				3	8.87 mΩ
				4	9.12 mΩ
				5	9.05 mΩ
1-2	Dielectric strength	When applied AC 1500V 1 minute between adjacent terminal	No change	Sample	600 V 1 minute
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
1-3	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 1000 MΩ	Sample	1000 MΩ min.
				1	50*10 ⁵ MΩ
				2	40*10 ⁵ MΩ
				3	45*10 ⁵ MΩ
				4	65*10 ⁵ MΩ
				5	55*10 ⁵ MΩ

2. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
2-1	Pin retention force	Push pin from insulator base at speed 25±3mm per minute	More than 0.8Kgf	Sample	0.8Kgf min.
				1	1.82 Kgf
				2	1.94 Kgf
				3	1.76 Kgf
				4	1.86 Kgf
				5	1.88 Kgf

3. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
3-1	Solderability	Soldering time: 5±0.5 sec. Soldering pot:230±5°C	Minimum: 90% of immersed area	Sample	90% of Immersed area
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
3-2	Resistance to soldering heat	Soldering time: 5±0.5 sec. Soldering pot:260±5°C	Appearance: No damage	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass



ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT		
			Sample	No damage	
3-3	Heat aging	105±2°C , 96 hours	Appearance: No damage	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
3-4	Humidity	40±2°C , 90-95%RH, 96 hours measurement must be taken within 30 min. after tested	Appearance: No damage	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
			Contact resistance: Less than twice of initial	Sample	< twice of initial
				1	9.02 mΩ
				2	9.14 mΩ
				3	9.27 mΩ
				4	9.16 mΩ
			Dielectric strength: To pass Para 1-2	Sample	Pass para 1-2
				1	Pass
				2	Pass
				3	Pass
4	Pass				
3-5	Temperature cycling	One cycle consists of: 1. -55 ⁺⁰ ₋₃ °C, 30 min 2. Room temp. 10-15 min 3. 85 ⁺³ ₋₀ °C, 30 min 4. Room temp. 10-15 min	Appearance: No damage	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
			Contact resistance: Less than twice of initial	Sample	< twice of initial
				1	8.87 mΩ
				2	9.12 mΩ
				3	9.06 mΩ
				4	9.08 mΩ
5	9.16 mΩ				



	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
				Sample	No damage
3-6	Salt spray	Temperature:35±3°C Solution:5±1% Spray time:48±4 hours Measurement must be taken after water rinse	Appearance: No damage	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
			5	Pass	
			Contact resistance: Less than twice of initial	Sample	< twice of initial
				1	9.89 mΩ
				2	10.07 mΩ
				3	9.94 mΩ
				4	9.97 mΩ
5	10.11 mΩ				

4. AMBIENT TEMPERATURE RANGE : -40 to + 105°C