

RELIABILITY TEST REPORT

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

SERIES NO.: CH81 Series

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

DATE OF TESTING: 7/ 03 / 06

TEST DEPART: QA TESTER: Scott.Lien

CONTAIN: ATTACHED

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	2.58 m
				2	2.98 m
				3	2.89 m
				4	2.25 m
				5	2.33 m
1-2	Dielectric strength	When applied AC 1500 V 1 minute between adjacent terminal	No change	Sample	1500 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	80*10 ⁵ MΩ
				2	90*10 ⁵ MΩ
				3	80*10 ⁵ MΩ
				4	90*10 ⁵ MΩ
				5	85*10 ⁵ MΩ

2. MECHANICAL PERFORMANCE:

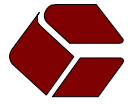
	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
2-1	Pin retention force	Push pin from insulator base at speed 25±3mm per minute	More than 0.8 Kgf	Sample	0.8Kgf min.
				1	1.19 Kgf
				2	1.26 Kgf
				3	1.21 Kgf
				4	1.46 Kgf
				5	1.23 Kgf

3. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
3-1	Solderability	Soldering time: 5±0.5 sec. Soldering pot:230±5	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	Insulator: Glass filled polyester UL 94V-0 Soldering time: 5±0.5 sec. Soldering pot:260±5	Appearance: No damage	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass



		Insulator: Nylon 6T Max. Infrared Reflow Soldering temperature & time : 230 for 60 sec 260 for 10 sec	Appearance: No damage	Sample 1 2 3 4 5	No damage Pass Pass Pass Pass
3-3	Heat aging	105±2 , 96 hours	Appearance: No damage	Sample 1 2 3 4 5	No damage Pass Pass Pass Pass
3-4	Humidity	40±2 , 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	2.59 m
				2	3.01 m
				3	2.92 m
				4	2.26 m
			Dielectric strength: To pass Para 1-2	Sample	Pass para 1-2
				1	Pass
				2	Pass
				3	Pass
4	Pass				
5	Pass				
3-5	Temperature cycling	One cycle consists of: 1. -55 ⁺⁰ ₋₃ , 30 min 2. Room temp. 10-15 min 3. 85 ⁺³ ₋₀ , 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	2.62 m
				2	2.88 m
				3	2.93 m
				4	2.36 m
			5	2.26 m	



3-6	Salt spray	Temperature:35±3°C Solution:5±1% Spray time:48±4 hours Measurement must be taken after water rinse	Appearance:	Sample	No damage
			No damage	1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
			Contact resistance:	Sample	< twice of initial
			Less than twice of initial	1	2.66 m
				2	2.99 m
				3	2.93 m
4	2.44 m				
5	2.38 m				