



瀚荃股份有限公司
CviLux Corporation

RELIABILITY TEST REPORT

TESTITEM :1.ELECTRICAL
2.MECHANICAL
3.ENVIRONMENTAL

SERIES NO. : CB74 Series

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

DATE OF TESTING : 6/ 18 / 06”

TEST DEPART : QA

TESTER :Scoot.Lien

CONTAIN : ATTACHED

SPEC.NO.: SPCB016A

REVIEWED : Jackal APPROVED : Rita VERIFIED :Scoot.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	8.92 mΩ
				2	9.06 mΩ
				3	9.22 mΩ
				4	8.99 mΩ
				5	9.42 mΩ
1-2	Dielectric strength	When applied AC 1000 V 1 minute between adjacent terminal	No Change	Sample	1000 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	60*10 ⁴ MΩ
				2	60*10 ⁴ MΩ
				3	70*10 ⁴ MΩ
				4	60*10 ⁴ MΩ
				5	70*10 ⁴ MΩ

2. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
2-1	Contact retaining force in insulator	Retention speed 25± 3 mm per minute from housing	More than 400 gram	Sample	400 gram min.
				1	1232 gram
				2	1211 gram
				3	1197 gram
				4	1184 gram
				5	1221 gram
2-2	Single contact insertion force	Measure force to insertion using 0.46 mm square pin at speed 25±3 mm per minute	600 gram max	Sample	600 gram max.
				1	94 gram
				2	91 gram
				3	74 gram
				4	81 gram
				5	99 gram
2-3	Single contact withdrawal force	Measure force to withdrawal using 0.46 mm square pin at speed 25±3 mm per minute	20 gram min	Sample	20 gram min.
				1	60 gram
				2	57 gram
				3	52 gram
				4	62 gram
				5	66 gram



2-4	Durability	Connector shall be subjected to 50 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial	Sample	< twice of initial
				1	8.96 mΩ
				2	9.09 mΩ
				3	9.25 mΩ
				4	9.06 mΩ
				5	9.46 mΩ

3.ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
3-1	Vibration	1. 5 mm 10-55-10 HZ/minute each 2.hours for X, Y and Z directions	Appearance: No damage Discontinuity: 1micro second max.	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
3-2	Solder ability	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
3-3	Resistance to soldering heat	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
3-4	Heat aging	105 ± 2 , 96 hours	Appearance: No damage	Sample	No damage
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
3-5	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	8.99 mΩ
				2	9.12 mΩ
				3	9.26 mΩ
				4	9.06 mΩ
				5	9.46 mΩ
			To pass para 1-2	Sample	No change
				1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass
3-6	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	8.99 mΩ
				2	9.12 mΩ
				3	9.22 mΩ
				4	8.99 mΩ
				5	9.48 mΩ
3-7	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	8.99 mΩ
				2	9.10 mΩ
				3	9.25 mΩ
				4	9.09 mΩ
				5	9.47 mΩ

4. AMBIENT TEMPERATURE RANGE

-40 to + 105°C ; + 215°C intermittent (Vapor Phase Solder Reflow) for SMT type.