

# **RELIABILITY TEST REPORT**

# **TESTITEM: 1.ELECTRICAL** 2.MECHANICAL **3.ENVIRONMENTAL**

SERIES NO.: CH17052MA00-NH

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

DATE OF TESTING: 2014 / 12 / 31

TEST DEPART: RD TESTER:

CONTAINT: ATTACHED



REVIEWED : <u>David</u> APPROVED : <u>Eisley</u> VERIFIED : <u>Denis</u>.



### 1.ELECTRICAL PERFORMANCE :

	ITEM	TEST CONDITION	REQUIREMENT	TE	ST RESULT		
1-1	Rated current and		3A 250 V				
	voltage		AC/DC (r.m.s)				
1-2	Dielectric strength	When applied AC 1000V	No change	Sample	500 V 1 minute		
		1minute between adjacent	C	1	Pass		
		terminal		2	Pass		
				3	Pass		
				4	Pass		
				5	Pass		
1-3	Insulation resistance	When applied DC 500 V	More than 5000 M $\Omega$	Sample	5000 MΩ min.		
		between adjacent terminal		1	$10 \times 10^6 \ \Omega$		
		or ground		2	$10 \times 10^6 \ \Omega$		
				3	$10 \times 10^{6} \Omega$		
				4	$10 \times 10^6 \ \Omega$		
				5	$10 \times 10^6 \ \Omega$		

### 2. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
2-1	Pin retention force	Push pin from insulator	More than 0.4 kgf	Sample	0.4 kgf min.
		base at speed 25±3mm per	C C	1	1.55 Kgf
		minute		2	1.68 Kgf
				3	1.64 Kgf
				4	1.42 Kgf
				5	1.38 Kgf

#### 3. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT	TE	ST RESULT
3-1	Solder ability	Soldering time: 3±0.5 sec.	Minimum:	Sample	95% of Immersed area
		Soldering pot:240±5°C	95% of immersed	1	Pass
		boldering pot.2 10_5 C	area	2	Pass
				3	Pass
				4	Pass
				5	Pass
3-2	Resistance to	Lead-Free Process for SMT	Appearance:	Sample	No damage
	soldering heat	Туре:	No damage	1	Pass
		Refer Reflow temperature		2	Pass
		profile(5-1)		3	Pass
				4	Pass
				5	Pass
3-3	Heat aging	105±3°C , 96 hours	Appearance:	Sample	No damage
			No damage	1	Pass
				2	Pass
				3	Pass
				4	Pass
				5	Pass



	ITEM	TEST CONDITION	REQUIREMENT	TES	ST RESULT
3-4	Cold Resistance	-40±3°C, 96 hours	Appearance:	Sample	No damage
			No damage	1	Pass
			i to duinage	2	Pass
				3	Pass
				4	Pass
				5	Pass
3-5	Temperature cycling	5 cycle consists of:	Appearance:	Sample	No damage
		1. $-40^{+0}$ °C, 30 min	No damage	1	Pass
				2	Pass
		2. Room temp. 10-15 min $\frac{13}{10}$		3	Pass
		3. 105 <sup>+3</sup> -0°C, 30 min		4	Pass
		4. Room temp. 10-15 min		5	Pass
3-6	Salt spray	Temperature:35±2°C	Appearance:	Sample	No damage
	1 5	Solution:5±1%	No damage	1	Pass
		Spray time:6±1 hours		2	Pass
		Measurement must be taken		3	Pass
		after water rinse		4	Pass
				5	Pass

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

5. Recommended IR Reflow Temperature Profile:

5-1 Using Lead-Free Solder Paste

