

ENGINEERING	PRODUCT SPECIFICATION	SPEC.NO.:	SPCH009B
DEPT.	For CHC3 Series SMT Pin Header	PAGE:	1/4

#### 1. SCOPE:

This specification contains the test requirement of subject pin headers when tested under the condition and below standards base on CviLux test procedure

#### 2. APPLICABLE STANDARDS:

MIL - STD - 202 Methods for test of connectors for electronic equipment

MIL - STD - 1344 JIS - C - 5402 Test methods for electrical connectors

JIS - C - 5402 Methods for test of connectors for electronic equipment

UL 94 Test for flammability of plastic materials for parts in devices and

appliance

J-STD-020 Resistance to soldering Temperature for through hole Mounted Devices SS-00254 Test methods for electronic components ,LEAD-FREE soldering Part

design standards

#### 3. APPLICABLE SERIES NO.: CHC3 Series

# 4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

#### 5. MATERIALS

5.1 Insulation: Nylon 6T with 30% GF. UL 94V-0, Color Black

5.2 Contact: Phosphor Bronze

#### 6. ACCOMMODATED P.C.BOARD

(P.C. Board on which the Pin Header are installed), 1.6 mm (.063")



REVIEWED: <u>Alex</u> APPROVED: <u>David</u> VERIFIED: <u>Sun</u>.



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## 7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT	
7.1	Rated current and voltage		Current:	
			0.5A Per Contact	
			Voltage:	
			200VAC;300DC (r.m.s)	
7.2	Contact resistance	Dry circuit of DC 20 mV max., 10 mA max.	Less than 20 mΩ	
7.3	Dielectric strength	When applied AC 500 V 1minute between adjacent terminal	No change	
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 100 MΩ	

### 8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Pin retention force	Push pin from insulator base at speed	More than 0.5 Kgf
		25± 3 mm per minute	

## 9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Solder ability	Tin-Lead Process	Minimum:
		Soldering time: 5 ± 0.5 second	90% of immersed area
		Soldering pot: 230 ± 5°C	
		Lead-Free Process	
		Soldering time: 3 ± 0.5 second	
		Soldering pot: 245 ± 5°C	
9.2	Resistance to soldering	Tin-Lead Process:	No damage
	heat	Refer Reflow temperature profile(11.1)	
		Soldering time: 10 second Max.	
		Soldering pot: 230 ± 5 °C	
		Lead-Free Process:	
		Soldering time: 20 second Max.	
		Soldering pot: 250~260°C	
		Refer Reflow temperature profile(11.2)	



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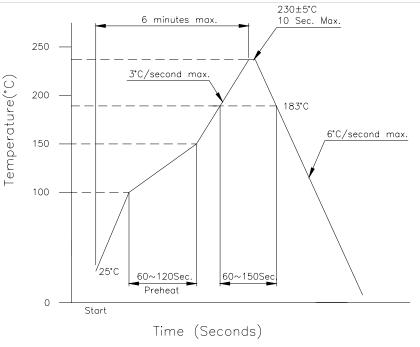
	ITEM	TEST CONDITION	REQUIREMENT
9.3	Heat aging	105± 2°C, 96 hours	No damage
9.4	Humidity	40± 2°C, 90-95% RH, 96 hours measurement must be taken within 30 min. after tested	Appearance: No damage Contact resistance: Less than twice of initial Dielectric strength: To pass para 7-3
9.5	Temperature cycling	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 Contact resistance: Less than twice of initial
9.6	Salt spray	Temperature: 35± 3°C Solution: 5± 1% Spray time: 48± 4 hours Measurement must be taken after water rinse	Appearance: No damage Contact resistance: Less than twice of initial

10. AMBIENT TEMPERATURE RANGE: -25 to +85°C

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## 11. Recommended IR Reflow Temperature Profile:

## 11.1 Using Typical Solder Paste



## 11.2 Using Lead-Free Solder Paste

