

ENGINEERING

PRODUCT SPECIFICATION

SPEC.NO.: SPCH030B

DEPT.

For 2.54 mm (.100") Pin Header of System CH85

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	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.: CH85 SERIES

- 4. SHAPE, CONSTRUCTION AND DIMENSIONS See attached drawings
- 5. MATERIALS See attached drawings
- 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>



ENGINEERING DEPT.

PRODUCT SPECIFICATION

For 2.54 mm (.100") Pin Header of System CH

SPEC.NO.: SPCH030B

185	PAGE:

2/4

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		3A 250V AC (r.m.s.)
7.2	Contact resistance	Dry circuit of DC 20 mV max., 100 mA max.	Less than 20 m Ω
7.3	Dielectric strength	When applied AC 1500 V 1minute between adjacent terminal	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 1000 $M\Omega$

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Pin retention force	Push pin from insulator base at speed	More than 0.8 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	DIP Type Tin-Lead Process:	No damage
	heat	Soldering time: 5 ± 0.5 second	
		Soldering pot: 240 ± 5°C	
		DIP Type Lead-Free Process:	
		Soldering time: 5 ± 0.5 second	
		Soldering pot: 260 ± 5°C	
		SMT Type Tin-Lead Process:	
		Refer Reflow temperature profile(11.1)	
		Soldering time: 10 second Max.	
		Soldering pot: 230 ± 5 °C	
		SMT Type Lead-Free Process:	
		Soldering time: 20 second Max.	
		Soldering pot: 250~260°C	
		Refer Reflow temperature profile(11.2)	



ENGINEERING DEPT. PRODUCT SPECIFICATION

SPEC.NO.: SPCH030B

For 2.54 mm (.100") Pin Header of System CH85

PAGE: 3/4

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

11. Recommended IR Reflow Temperature Profile:

11.1 Using Typical Solder Paste





