

<b>ENGINEERING</b> <b>DEPT.</b>	<b>PRODUCT SPECIFICATION</b> <b>For 2.00 mm (.079") Pin Header of System CH21</b>	<b>SPEC.NO.: SPCH019B</b> <b>PAGE: 1/4</b>
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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.: **CH21 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), 0.8 mm (.031") ~ 1.6 mm (.063")



REVIEWED :  Alex  APPROVED :  David  VERIFIED :  Sun  .

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7. ELECTRICAL PERFORMANCE:

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

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Pin retention force	Push pin from insulator base at speed 25± 3 mm per minute	More than 0.8 Kgf

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Solder ability	<b>Tin-Lead Process:</b> Soldering time: 5 ± 0.5 second Soldering pot: 230 ± 5°C <b>Lead-Free Process:</b> Soldering time: 3 ± 0.5 second Soldering pot: 245 ± 5°C	Minimum: 90% of immersed area
9.2	Resistance to soldering heat	<b>DIP Type Tin-Lead Process:</b> Soldering time: 5 ± 0.5 second Soldering pot: 240 ± 5°C <b>DIP Type Lead-Free Process:</b> Soldering time: 5 ± 0.5 second Soldering pot: 260 ± 5°C <b>SMT Type Tin-Lead Process:</b> Refer Reflow temperature profile(11.1) Soldering time: 10 second Max. Soldering pot: 230 ± 5 °C <b>SMT Type Lead-Free Process:</b> Soldering time: 20 second Max. Soldering pot: 250~260°C Refer Reflow temperature profile(11.2)	No damage

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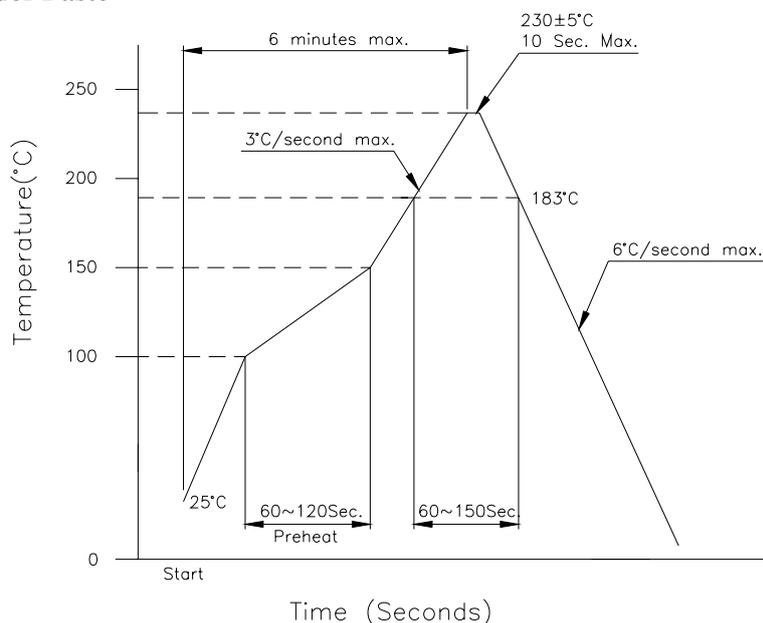
	ITEM	TEST CONDITION	REQUIREMENT
9.3	Heat aging	105± 2°C, 96 hours	No damage
9.4	Humidity	40± 2°C, 90-95% RH, 96 hours measurement must be taken within 30 min. after tested	Appearance: No damage Contact resistance: Less than twice of initial Dielectric strength: To pass para 7-3
9.5	Temperature cycling	One cycle consists of : (1)-55 <sup>+0</sup> / <sub>-3</sub> °C , 30 min. (2)Room temp. 10-15 min. (3) 85 <sup>+3</sup> / <sub>-0</sub> °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





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### 11.2 Using Lead-Free Solder Paste

