

<b>ENGINEERING DEPT.</b>		<b>PRODUCT SPECIFICATION</b> <b>For 2.54 mm (.100") Pin Header of</b> <b>System CH31</b>	<b>SPEC.NO.: SPCH003H</b>
<b>REVISIONS</b>	<b>ECNT120128</b>		<b>PAGE: 1/4</b>

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
EIA - 364	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

3. APPLICABLE SERIES NO.: **CH31 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 : Eisley APPROVED : Sun VERIFIED : Eric .

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**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 mΩ
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 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	Solderability	<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 (Stamping before plated) Spray time: 24 ± 4 hours (Stamping after plated) Mate connectors and expose to the following salt mist conditions. Upon completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water and dried naturally, after which the specified measurements shall be performed. The specimens shall be suspended from the top using waxed twine, string or nylon thread. The test only define the plating area, without plating area (as copper cross section) will not be defined. (EIA 364-26B / MIL-STD-202 Method 101)	Appearance: No damage on function Contact resistance: Less than twice of initial

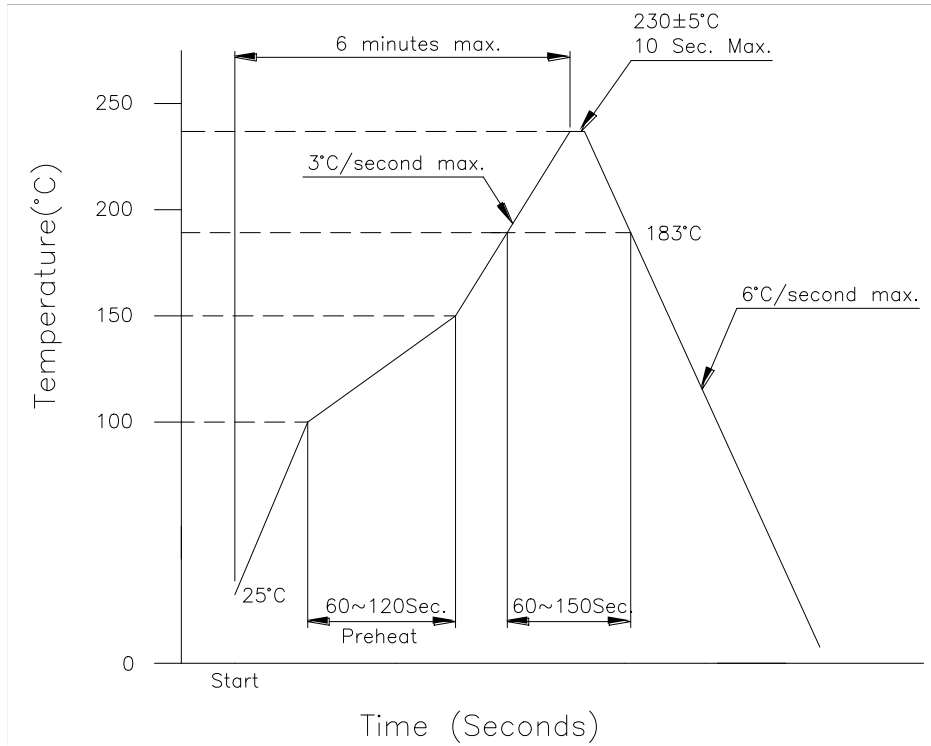
**10. AMBIENT TEMPERATURE RANGE:**

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

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11. Recommended IR Reflow Temperature Profile:

11.1 Using Typical Solder Paste



11.2 Using Lead-Free Solder Paste

