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| ENGINEERING | PRODUCT SPECIFICATION | SPEC.NO.: SPCH031B |
| DEPT. | For 2.54 mm (.100") Pin Header of System CH87 | 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:

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| 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.: **CH87 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 : Alex APPROVED : David VERIFIED : Sun .

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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 | Solder ability | Tin-Lead Process: Soldering time: 5 ± 0.5 second Soldering pot: 230 ± 5°C Lead-Free Process: Soldering time: 3 ± 0.5 second Soldering pot: 245 ± 5°C | Minimum: 90% of immersed area |
| 9.2 | Resistance to soldering heat | DIP Type Tin-Lead Process: 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) | No damage |

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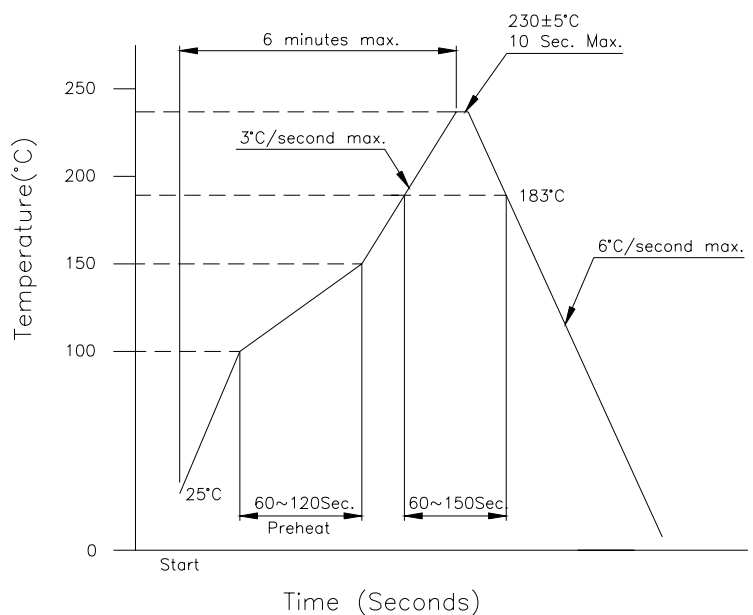
| | ITEM | TEST CONDITION | REQUIREMENT |
|-----|---------------------|---|--|
| 9.3 | Heat aging | 105± 2°C, 96 hours | No damage |
| 9.4 | Humidity | 40± 2°C, 90-95% RH, 96 hours measurement must be taken within 30 min. after tested | Appearance: No damage Contact resistance: Less than twice of initial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



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11.2 Using Lead-Free Solder Paste

