| ENGINEERING DEPT. | PRODUCT SPECIFICATION<br>For 2.00 mm (.079″) Pin Header of System CH75 | SPEC.NO.: SPCH023B<br>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.: **CH75 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 .

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

| ENGINEERING DEPT. | PRODUCT SPECIFICATION For 2.00 mm (.079″) Pin Header of System CH75 | SPEC.NO.: SPCH023B PAGE: 3/4 |
|---|---|---|

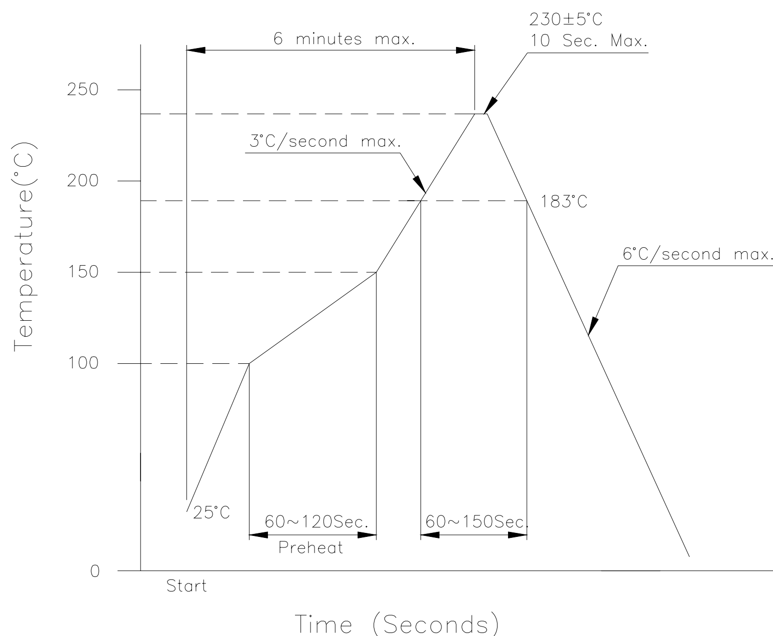
| | ITEM | TEST CONDITION | REQUIREMENT |
|---|---|---|---|
| 9.3 | Heat aging | 105± 2°C, 96 hours | No damage |
| 9.4 | Humidity | 40± 2°C, 90-95% RH, 96 hours measurement must be taken within 30 min. after tested | Appearance: No damage<br>Contact resistance:<br>Less than twice of initial<br>Dielectric strength:<br>To pass para 7-3 |
| 9.5 | Temperature cycling | One cycle consists of :<br>(1)-55 $^{+0}_{-3}$ °C , 30 min.<br>(2)Room temp. 10-15 min.<br>(3) 85$^{+3}_{-0}$ °C , 30 min.<br>(4)Room temp. 10-15 min. | Appearance: No damage<br>Contact resistance:<br>Less than twice of initial |
| 9.6 | Salt spray | Temperature: 35± 3°C<br>Solution: 5± 1%<br>Spray time: 48± 4 hours<br>Measurement must be taken after water rinse | Appearance: No damage<br>Contact resistance:<br>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



11.2 Using Lead-Free Solder Paste