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| <b>ENGINEERING</b><br><br><b>DEPT.</b> | <b>PRODUCT SPECIFICATION</b><br><br><b>For Pitch 1.27mm(.050") Pin Header of System CH53</b> | <b>SPEC.NO.: SPCH036B</b><br><br><b>PAGE: 1/3</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     |
| SS-00254         | Test methods for electronic components ,LEAD-FREE soldering Part design standards |

3. APPLICABLE SERIES No. : **CH53 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  |                       |
|-----|---------------------------|---|-----------------------|
| 7.1 | Rated current and voltage |   | 1.5A 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 600 V 1 minute 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 | Square Pin :<br>More than 0.3 Kgf |
|     |                     |   | Round Pin :<br>More than 0.6 Kgf  |

9. ENVIRONMENTAL PERFORMANCE:

|     | ITEM                         | TEST CONDITION  | REQUIREMENT  |
|-----|------------------------------|---|--|
| 9.1 | Solder ability               | Soldering time: 3 ± 0.5 second<br>Soldering pot: 245 ± 5°C  | Minimum:<br>90% of immersed area   |
| 9.2 | Resistance to soldering heat | Soldering time: 5 ± 0.5 second<br>Soldering pot: 260 ± 5°C  | No damage  |
| 9.3 | Heat aging                   | 105± 2°C, 96 hours  | No damage  |
| 9.4 | Humidity                     | 40± 2°C, 90-95% RH, 96 hours<br>measurement must be taken within 30 min.<br>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 <sup>+0</sup> / <sub>-3</sub> °C , 30 min.<br>(2)Room temp. 10-15 min.<br>(3) 85 <sup>+3</sup> / <sub>-0</sub> °C , 30 min.<br>(4)Room temp. 10-15 min. | Appearance: No damage<br>Contact resistance:<br>Less than twice of initial   |



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|     | ITEM       | TEST CONDITION  | REQUIREMENT  |
|-----|------------|---|--|
| 9.6 | Salt spray | Temperature: $35 \pm 3^{\circ}\text{C}$<br>Solution: $5 \pm 1\%$<br>Spray time: $48 \pm 4$ 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