

* 1050 Series Connector *

This product specification contains the test method, the general performance and requirements for interconnection system connector.

With 1050 series housing and 1050 series terminal.

1. Construction and dimensions shall be in accordance with the referenced drawings.

产品结构及尺寸依据所提供的图面。

2. Characteristics 特性:

Current rating 额定电流: 1 A AC,DC

Voltage rating 额定电压: 200V AC,DC

Temperature rating 额定温度: -25°C ~ +85°C

Applicable wire 适用的线: conductor construction size #28 ~ #36

3. Electrical performance 电气性能:

| ITEM 项目 | DESCRIPTION 内容 | TEST METHOD & CONDITION 测试方法与条件 | REQUIREMENT 需求 |
|------------|--|---|---|
| 3-1 | Contact Resistance 接触阻抗 | It should be tested in accordance with method EIA-364-23 | Initial: 40 mΩ max. After environmental Test: 80 mΩ max. |
| 3-2 | Insulation Resistance 绝缘阻抗 | It should be tested in accordance with Method EIA-364-21. | Initial: 100 MΩ min. After humidity test 10 MΩ min. |
| 3-3 | Dielectric Withstanding Voltage 耐电压 | Unmated connectors shall be tested in accordance with method EIA-364-20 when the AC 500 V rms for one minute applied between adjacent contacts. | No evidence of break-down and flashover |

4. Mechanical Performance 机械特性:

| ITEM 项目 | DESCRIPTION 内容 | TEST METHOD & CONDITION 测试方法与条件 | REQUIREMENT 需求 |
|------------|---|--|--|
| 4-1 | Crimp Tensile Strength 铆合张力强度 | Pulling load shall be applied between correctly crimped contact and wire at a constant speed. Pulling speed: 25 mm / minute. | AWG #28: 1.0kgf min. AWG #30: 0.8kgf min. AWG #32: 0.5kgf min. AWG #34: 0.3kgf min. AWG #36: 0.2kgf min. |
| 4-2 | Insertion force & Withdrawal force 插拔力 | Insertion and Withdrawal connectors at the speed rate of 25 mm/minute. | Refer to paragraph 6. |
| 4-3 | contact insertion Force Terminal 插入力 | Insertion the crimped terminal into the housing at the speed rate of 25 mm / minute. | 0.5kgf max. |
| 4-4 | contact retention Force terminal 保持力 | The crimped terminal in a housing shall be pulled in a perpendicular at a constant speed of 20mm/minute. | 0.5 kgf min. |

| ITEM 项目 | DESCRIPTION 内容 | TEST METHOD & CONDITION 测试方法与条件 | REQUIREMENT 需求 |
|------------|--------------------------------|---|--|
| 4-5 | Pin retention Force pin 保持力 | Apply axial push force at the speed rate of 25mm/minute. | 0.3 kgf min. |
| 4-6 | Durability 耐久性 | It should be tested in accordance with method EIA-364-09. Connector shall be subjected to 50 cycles of insertion and withdraw. | No defects. Contact resistance shall be 80 mΩ max. |
| 4-7 | Vibration 振动性 | The connector mated PCB shall be vibrated in accordance with method EIA-364-28 tested condition B. Frequency:10-55-10 Hz/min. Amplitude: 1.52mm Period:2 hours for each direction. | No evidence of loosening of parts or electric discontinuity. Contact resistance: 80 mΩ max. |

5. Environmental Performance 环境特性:

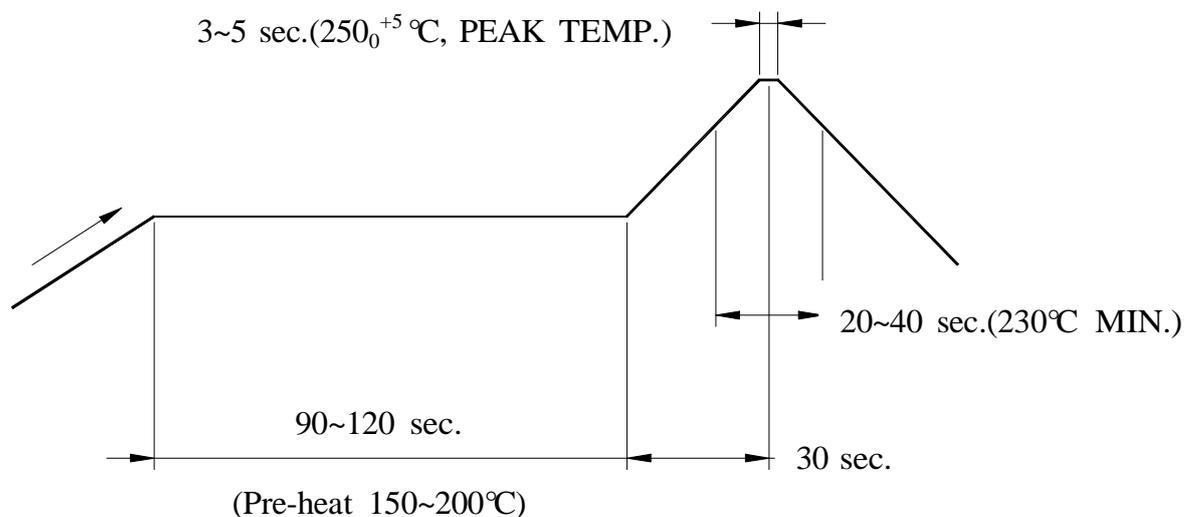
| ITEM | DESCRIPTION 内容 | TEST METHOD & CONDITION 测试方法与条件 | REQUIREMENT 需求 |
|------|---------------------------------------|--|--|
| 5-1 | Humidity 耐湿性 | The unmated connector shall be tested in accordance with method EIA-364-31 test procedure type I condition B. Temperature: 40±2 °C Humidity: 90 ~ 95 % (RH) Period: 96 hours. | No damage. Contact resistance shall be 80 mΩ max. Insulation resistance: to paragraph 3-2. Dielectric withstand ing voltage: to paragraph 3-3 |
| 5-2 | Salt Spray 盐雾试验 | Connector shall be tested in accordance with method EIA-364-26 Temperature: 35±2 °C Density: 5 % in weight. Period: 24 hours. | No damage. Contact resistance shall be 80 mΩ max. |
| 5-3 | Solderability 着锡性 | Connector termination ends shall be checked for solderadility in accordance with method EIA-364-52. Solder temperature: 245±5 °C Immersion period: 5±0.5 sec. | No damage. Minimum: 95 % of immersed area. |
| 5-4 | Resistance to Soldering Heat 耐高温焊接 | Specimen shall be mounted on PCB. Solder temperature:260±5°C Immersion period:5±0.5sec. When reflowing: Refer to paragraph 6. | NO damage and deformation. |

| ITEM | DESCRIPTION 内容 | TEST METHOD & CONDITION 测试方法与条件 | REQUIREMENT 需求 |
|------|-------------------|------------------------------------|-------------------|
|------|-------------------|------------------------------------|-------------------|

6. Insertion/Withdrawal force 插拔力:

| No. of circuits | Insertion Force (kgf max.) | Withdrawal Force (kgf min.) |
|-----------------|----------------------------|-----------------------------|
| 20 | 1.0 | 0.28 |
| 30 | 1.5 | 0.42 |

7. Infrared reflow conditions:



TEMPERATURE CONDITION GRAPH
(TEMPERATURE ON BOARD PATTERN SIDE)

NOTE: Please check the mount condition(reflow soldering condition) by your own devices beforehand, because the condition changes by the soldering devices, p.c.boards, and so on. No moisture treatment before reflow process.

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| APPR BY: Chard | CHKD BY: Angel | SPEC BY: Dylan |
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