| LEOCO CORPORATION | PRODUCTION SPECIFICATION | No. | S-18-5083 | REV | 1 |
|---|---|---|---|---|---|

# ＊ 5083 Series Connector System ＊

This product specification contains the test method, the following datum are the general performance and requirements of the LEOCO 5083 series connector

1. Construction and dimensions shall be in accordance with the referenced drawings.
产品结构和尺寸依据所提供的产品图面.

2. Characteristics 特性:

Current rating 额定电流: 7A AC,DC

Voltage rating 额定电压: 250V AC,DC

Temperature rating 额定温度: -25℃ ~ +105℃

Applicable wire 适用线材: conductor construction size #18 ~ #26

3. Electrical performance 电气特性:

| ITEM | 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 | 20 mΩ max. |
| 3-2 | Insulation Resistance 绝缘阻抗 | It should be tested in accordance with Method EIA-364-21 | 1000MΩ min. |
| 3-3 | Dielectric Withstanding Voltage 耐电压 | Unmated connectors shall be tested in Accordance with method EIA-364-20 When the AC 1000 V rms for one minute applied between adjacent contacts. | No breakdown |

4. Mechanical Performance 机械特性:

| ITEM | 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 #18: 10.0 kgf min.<br>AWG #20: 6.0 kgf min.<br>AWG #22: 4.0 kgf min.<br>AWG #24: 2.5 kgf min.<br>AWG #26: 1.5 kgf min. |
| 4-2 | Contact Insertion Force 接触插入力 | The force required to insert a contact into a housing. Inserting speed: 25 mm / minute. | 1.8 kgf max. |
| 4-3 | Contact removal Force 接触拨出力 | Crimped contact mounted in a housing shall be pulled in an alignment at a constant speed of 25 mm / minute. | 3.6 Kgf min. |
| 4-4 | Post retention force 保持力 | The end of a post shall be pushed in a perpendicular to base housing at a constant speed of 25mm/minute | 2.0 kgf min |
| 4-5 | Insertion Force 插入力 | Housing with contact mating header at a constant speed of 25 mm / minute. | 1.2 kgf min |
| 4-6 | Withdrawal Force 拨出力 | Housing with contact mating header, Pull out from header at speed 25 mm / minute. | 0.35 kgf max |
| 4-7 | Durability 耐久力 | It should be tested in accordance with method EIA-364-09 Connector shall be subjected to 200 cycles of insertion and withdrawal | No defects. Contact resistance shall be 20mΩ max |

| ITEM | DESCRIPTION<br>内容 | TEST METHOD & CONDITION<br>测试方法与条件 | REQUIREMENT<br>需　　求 |
|---|---|---|---|
| 4-8 | Vibration<br>振动性 | The connector mated PCB shall be vibrated in accordance with method EIA-364-28.<br>There shall be no current discontinuity longer than 1 microsecond during the test .<br>Frequency: 10-55-10 Hz / min.<br>Amplitude: 1.52mm<br>Period: 2 hours for each direction | No evidence of loosen-ing of parts or electric discontinuity.<br>Contact resistance less than twice of initial. |

5. Environmental Performance 环境特性:

| ITEM | DESCRIPTION<br>内容 | TEST METHOD & CONDITION<br>测试方法与条件 | REQUIREMENT<br>需　　求 |
|---|---|---|---|
| 5-1 | Humidity<br>耐湿性 | The unmated connector shall be tested in accordance with method EIA-364-31.<br>Temperature: 40±2 °C<br>Humidity: 90 ~ 95 % (RH)<br>Period: 96 hours. | NO damage.<br>Contact resistance less Than twice of initial.<br>Insulation resistance: to paragraph 3-2.<br>Dielectric withstand ing voltage: to paragraph 3-3 |
| 5-2 | Salt Spray<br>盐雾试验 | Connector shall be tested in accordance with method EIA-364-26<br>Temperature: 35±2 °C<br>Density: 5 % in weight.<br>Period: 24 hours. | NO damage.<br>Contact resistance less than twice of initial. |
| 5-3 | Solderability<br>着锡性 | Connector termination ends shall be checked for solderability in accordance with method EIA-364-252<br>Solder temperature: 245±5 °C<br>Immersion period: 5±0.5 sec. | NO damage.<br>Minimum: 95 % of immersed area. |
| 5-4 | Resistance to Soldering Heat<br>附着耐热性 | Specimen shall be mounted on PCB.<br>Solder temperature: 255±5 °C<br>Immersion period: 5±0.5 sec. | NO damage and deformation. |
| 5-5 | Temperature rise<br>温升 | Mate connectors: Measure the temperature rise at rated current after 4 hours.<br>Test method: EIA-364-70 | Temperature rise 30°C max. |