

* 2020 Series Connector *

This product specification contains the test method, the general performance and requirements for interconnection system connector. With 2020 series socket, 2020 series header and 2020 series terminal.

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

尺寸与结构依据所提供的图面

2. Characteristics 特性:

Current rating 额定电流: 2 A AC/ DC

Voltage rating 额定电压: 250V AC/ DC

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

Applicable wire 适用的线: conductor construction size #24 ~ #30

3. Electrical performance 电气性能:

Item 项目	Description 内容	Test Method & Condition 测试方法及条件	Requirement 需求
3-1	Contact Resistance 接触阻抗	It should be tested in accordance with method EIA-364-23.	Initial: 20 MΩ max. After environmental Test: 40 MΩ max.
3-2	Insulation Resistance 绝缘阻抗	It should be tested in accordance with Method EIA-364-21.	Initial: 1000MΩ min. After humidity test: 500 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 breakdown and flashover

4. Mechanical Performance 机械性能 :

Item 项目	Description 内容	Test Method & Condition 测试方法及条件	Requirement 需求
4-1	Crimp Tensile Strength 铆合拉力强度	Pulling load shall be applied between Correctly crimped contact and wire at a constant speed. Pulling speed: 25 mm /minute.	AWG #24: 4.5 kgf min. AWG #26: 2.7 kgf min. AWG #28: 1.5 kgf min. AWG #30: 1.2 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.	900 gram max.
4-3	Contact removal Force 接触拔出力	Crimped contact mounted in a housing shall be pulled in an alignment at a constant speed of 25 mm / minute.	1.0 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 25 mm / minute.	1.0 kgf min.
4-5	Insertion Force 插入力	Housing with contact mating header at a constant speed of 25 mm / minute.	300 gram max.
4-6	Withdrawal Force 拔出力	Housing with contact mating header, Pull out from header at speed 25 mm / minute.	60 gram min.

Item 项目	Description 内容	Test Method & Condition 测试方法及条件	Requirement 需求
4-7	Durability 耐久性	It should be tested in accordance with method EIA-364-09. Connector shall be subjected to 100 cycles of insertion and withdrawal	No defects. Contact resistance shall be 20 MΩ max.
4-8	Vibration 振动测试	The connector mated PCB shall be vibrated in accordance with method EIA-364-28 tested condition B. There shall be no current discontinuity longer than 1 microsecond during the test . 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 less than twice of initial.

5. Environmental Performance 环境测试 :

Item 项目	Description 内容	Test Method & Condition 测试方法及条件	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 less than twice of initial. Insulation resistance: to pass para. 3-2. Dielectric withstanding voltage: to pass parameter 3-3
5-2	Salt Spray 盐雾测试	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 less than twice of initial.
5-3	Solderability 着锡性	Connector termination ends shall be checked for solderability 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 耐高温测试	Specimen shall be mounted on PCB. Solder temperature: 260±5 °C Immersion period: 5±0.5 sec.	NO damage and deformation.

6.Mating and Unmating Force 插入力和拔出力:

PIN No.	Mating (Kgf max)	Unmating (Kgf min)
6	1.8	0.48
8	2.4	0.64
10	3.0	0.80
12	3.6	0.96
14	4.2	1.12
16	4.8	1.28
18	5.4	1.44
20	6.0	1.60
22	6.6	1.76
24	7.2	1.92
26	7.8	2.08
28	8.4	2.24
30	9.0	2.40
32	9.6	2.56

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