

* 2420 SERIES AND 2421 SERIES CONNECTOR *

This product specification contains the test method, the general performance and requirements for interconnection systems connector with 2420 series socket 、 2421 series header and 2453 series terminal.

1. Construction and dimensions shall be in accordance with the referenced drawings.
产品结构 and 尺寸依据所提的产品图面
2. Characteristics 特性:
Current rating 额定电流: 3A AC DC
Voltage rating 额定电压 : 250V AC DC
Temperature rating 额定温度: -25℃ ~ +85℃
Applicable wire 适用的线: conductor construction size #22~#28
3. Electrical performance 电气特性:

ITEM 项目	DESCRIPTION 内容	TEST METHOD & CONDITION 测试方法及条件	REQUIREMENT 要求
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 tested: 40 mΩ max.
3-2	Insulation Resistance 绝缘电阻	It should be. tested in accordance with method EIA-364-21	Initial : 1000 MΩ min. After humidity tested: 500 MΩ min.
3-3	Dielectric withstanding Voltage 耐电压	Unmated connector shall be tested in accordance with method EIA-364-20 When the AC 800V rms for one minute applied between adjacent contacts.	No evidence of breakdown and flashover,

4. Mechanical Performance 机械特性 :

ITEM 项目	DESCRIPTION 内容	TEST METHOD & CONDITION 测试方法及条件	REQUIREMENT 要求
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 #22 : 4.0 kgf min AWG #24 : 2.5 kgf min AWG #26 : 1.5 kgf min AWG #28 : 1.0 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.	600 gf 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.	1.5 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.	1.0kgf min.
4-5	Insertion force 插入力	Housing with contact mating header, at a constant speed of 25mm/minute.	700 gf max.

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Item 项目	Description 内容	Test Method & Condition 测试方法及条件		Requirement 要求			
4-6	Withdrawal force 拔出力	Housing with contact mating header, Pull out from header at speed 25mm/minute.		150 gf min.			
4-7	Durability 耐久力	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 振动性	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 环境特性:							
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℃ Humidity:90-95% (RH), Period:96 hours		No damage. Contact resistance: Less than twice of Initial. Insulation resistance: to pass paragraph .3-2. Dielectric withstanding voltage: to pass paragraph 3-3.			
5-2	Salt Spray 盐雾测试	connector shall be tested in accordance with method EIA-364-26 Temperature:35±2℃ Density: 5% in weight. Period:24 hours		No damage Contact resistance: Less than twice of initial.			
5-3	Solder ability 着锡性	Connector termination ends shall be checked for solder ability in accordance with method EIA-364-52 Solder temperature:245±5℃ Immersion period:5±0.5sec.		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℃ Immersion period:5±0.5sec.		Visual: No damage.			

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Item	Description	Test Method & Condition		Requirement			
5-5	Heat aging 耐高温性	Temperature:85±2℃ Period:96 hours		No damage. Contact resistance less than twice of initial.			
5-6	Low temperature 耐低温性	Temperature:-25±3℃ Period:96 hours		No damage. Contact resistance less than twice of initial.			

6. 2420 Series and 2421 Series Mating force and unmating force:

Unit:Kgf

Number of Circuits	Mating Force	Unmating Force
	Initial(max.)	Initial (min.)
2	3.5	0.4
3	4.5	0.5
4	5.5	0.6
5	6.0	0.7
6	6.5	0.8
7	7.5	0.9
8	7.5	1.0
9	8.5	1.1
10	8.5	1.2
11	10.0	1.3
12	10.5	1.4
13	10.5	1.5
14	11.0	1.6
15	11.5	1.7

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