

Product Specification 【产品规格书】	Document No.	PS-2531-01
Product Name 【产品名称】： 2.50 mm Pin Header Connectors	Date Issued	2022/2/19
	Date Revised	/
	Version	A0

This specification is only referred to the 2531 series connector

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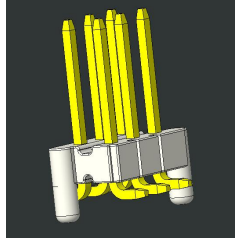
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【1.适用范围 Scope】

此规格包括 2.50mm Pitch 2531 Series 连接器规格说明。

This Specification includes the 2.50 mm Pitch 2531 Series Connector Specification.

【2.产品型号描述 Product Description】

产品名称 Part Name	产品料号 Part No.	产品图示 Picture
针座/Wafer	2531WVS-2*03-9TSW1NR	

【3.材质与表面处理 Material and surface treatment】

规格内容 Specification		材质 Materials	颜色/表面处理 Color/Surface treatment
针座 /Wafer	端子 /Terminal	磷铜/Phosphor Bronze	Under plated: Ni (0.75~2 μ m)overall; Top planting: Sn (4~6 μ m)overall;
	胶壳 /Housing	PA9T	UL94V-0

(上述参数请以工程图为准/Please Refer to the Project drawing for the above Specification)

【4. 额定等级 Ratings and applicable wires】

项目 Item	规格 Specification	
额定电压 Rated Voltage	250V	[AC/DC]
额定电流 Rated Current	3.0A	
使用温度范围 Ambient Temperature Range	-40 $^{\circ}$ C~+105 $^{\circ}$ C	

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【5.性能 Performance】

5-1. 电气性能 Electrical Performance.

测试内容 Item		测试方法 Test Condition	判定要求 Requirement
5-1-1	接触阻抗 Contact Resistance	公母配合,开放电压 50mV 以下,电流 100mA 检测连接器 A~B 区. Mate connectors, measure by dry circuit, 50mV MAX, 100mA. (Based upon EIA-364-23).	1. Initial value :20 mΩ max. 2. Final value :40 mΩ max
5-1-2	绝缘阻抗 Insulation Resistance	公母配合,在相邻端子之间,使用 500V 的直流电,检测连接器. Mate connectors, apply 500V DC between adjacent terminal or ground. (Based upon EIA-364-21).	1000 Megohm Min.
5-1-3	耐电压 Dielectric Strength	公母配合,在相邻端子之间,施加 1000V 的有效值电压.检测连接器 Mate connectors, 1000V RMS voltage is applied between adjacent terminals. Detection connector (Based upon EIA-364-20).	没有击穿或出现电火花 No Breakdown and Flashover

5-2. 机械的性能 Mechanical Performance.

测试内容 Item		测试方法 Test Condition	判定要求 Requirement
5-2-1	Pin 针保持力 Pin Retention Force	以每分 50±3mm 的速率,将 PIN 针从 Wafer 内轴向拔出的力量. Apply axial push force at the speed rate of 50±3mm/minute. (Based upon EIA-364-29).	15.N {1.53kgf} Min.

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5-3. 环境性能及特殊要求 Environmental Performance and Special Requirments.

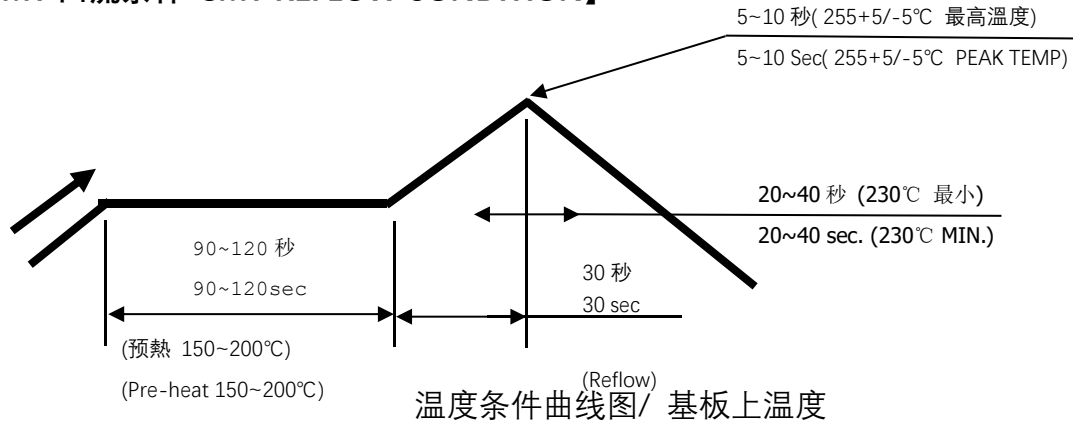
测试内容 Item		测试方法 Test Condition	判定要求 Requirement	
5-3-1	重复插拔 Repeated Insertion/ Withdrawal	以每分锺不超过 10 次的速率,将公母插拔 30 次. When mated up to 30 cycles repeatedly by the rate of 10 cycles per minute.(Based upon EIA-364-09).	接触阻抗 Contact Resistance	40 milliohms Max.
			外观 Appearance	无异状 No Damage
			耐电压 Dielectric Strength	满足 5-1-2 Must meet 5-1-2
5-3-2	振动测试 Vibration test	振幅: 1.5mm P-P 时间: 10~55~10 HZ in 1 minute 持续时间: 每轴向 2 小时 Amplitude: 1.5mm P-P Sweep time: 10~55~10 HZ in 1 minute Duration: 2 hours in each X.Y.Z axials. (Based upon EIA-364-28B/MIL-STD-202 Method 213B Cond.A)	外观 Appearance	无异状 No Damage
			瞬断 Discontinuity	1 micro-second Max.
			接触阻抗 Contact Resistance	40 milliohms Max.
5-3-3	冲击测试 Shock test	在 X.Y.Z 上 6 个方向上,以 490m/s ² (50g 的力量)冲击下各 3 回.490m/s ² {50G}, 3 strokes in each X.Y.Z. axes. (Based upon EIA-364-27B/MIL-STD-202 Method 213B Cond.A)	外观 Appearance	无异状 No Damage
			瞬断 Discontinuity	1 micro-second Max.
			接触阻抗 Contact Resistance	40 milliohms Max.
5-3-4	耐湿性 Humidity	温度: 40±2°C 湿度: 90~95%(RH) 持续时间: 96 hours Temperature: 40±2°C Relative Humidity: 90~95% Duration: 96 hours (Based upon EIA-364-31A/MIL-STD-202 Method 103B Cond.B)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	40 milliohms Max.

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5-3-5	温度变化 Temperature Cycling	从-40°C持续 30 分钟升至+105°C持续 30 分钟,循环 5 次. 5 cycles of: a) -40°C 30 minutes. b) +105°C 30 minutes. (Based upon EIA-364-32B)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	40 milliohms Max.
5-3-6	盐水喷雾 Salt Spray	在温度 35±2°C,盐水浓度 5±1%下,盐水喷雾 48±1 小时. 48±1 hours exposure to a salt spray from the 5±1% solution at 35±2°C. (Based upon EIA-364-26B/MIL-STD-202 Method 101D Cond.B).	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	40 milliohms Max.
5-3-7	耐热性 Heat Resistance	105±2°C,96 hours. (Based upon MIL-STD-202 Method 108A Cond. A)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	40 milliohms Max.
5-3-8	焊锡性 Solder- Resistance	焊接时间: 3~5 秒. 焊接温度: 245±5°C. Soldering time: 3~5sec solder. Temperature: 245±5°C.	浸锡 Solder Wetting	浸渍面积需 95%以上 95% of immersed area must show no voids, pin holes.
5-3-9	焊锡耐热性 Resistance to Soldering Heat	焊接时间: 5~10 秒. 焊接温度: 255+5/-5°C. Soldering time:5~10 sec solder. Temperature:255+5/-5°C. (Based upon EIA-364-56D)	外观 Appearance	无异状 No Damage

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【6. SMT 回流条件 SMT REFLOW CONDITION】



TEMPERATURE CONDITION GRAPH/ (TEMPERATURE ON BOARD PATTERN SIDE)

注记: 由于 P.C 板等焊接装置改变条件,所以请预先用自己的装置检查回流焊的条件.

Notes: Please check the reflow soldering condition by your own devices beforehand. Because the condition changes by the soldering devices, P.C. boards, and so on.