

Product Specification [产品规格书]:	Document No	PS-2570-01
Subject [主题]: 2.54mm Pitch 2570 Pin Header Series Connector Specification	Date Issued	2023/05/10
	Date Revised	
	Version	X0

This specification is referred to the 2.54mm H11.51 series PIN Hearer Connector

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【1.适用范围 Scope】

此种规格包括 2.54mm Pitch H11.51 Series 连接器规格说明.

This Specification Covers the 2.54mm Pitch2570 H11.51 Series Connector Specification.

【2.规格与料号 Spec and Part number】

规格内容 Specification	产品料号 Production No.	产品图示 Picture of Product
针座 Header	2570WV-02P-NOSW1BG-Q	

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

规格内容 Specification	材质 Materials	表面处理 Disposal of Surface	
针座 Header	Housing	PA66 UL 94V-0	黑色 Black
	PIN	黄铜/ Brass	Under plate:Ni 50~100u"(1.25~2.5um)overall Top planting:Sn 100~180u"(2.5~4.5um)overall

(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【Standard】	
额定电压 Rated Voltage (Max.)	250V	[AC/DC]
额定电流 Rated Current (Max.)	3A	
使用温度范围 Ambient temperature Range	-40°C ~ +105°C	
仓储条件 Storage Condition	温度 Temperature	-40°C ~ +65°C
	湿度 Humidity	85%R.H 最大(未结露) 85%R.H Max.(No Condensation)
	时间 Terms	出货后 6 个月(未拆包装) 6 months after shipping(unopened package)

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【5.性能 PERFORMANCE】**5-1. 外观检查 Examination of product.**

项 目 【Item】	条 件 【Test Condition】	规 格 【Requirement】
5-1-1 产品外观检查 Visual Inspection	产品符合图纸和规格书要求。 Product shall meet requirements of applicable product drawing and specification.	Visual, dimensional and functional per applicable quality inspection plan.

5-2. 电气的性能 Electrical Performance.

项 目 【Item】	条 件 【Test Condition】	规 格 【Requirement】
5-2-1 接触阻抗 Contact Resistance	开放电压 20mV 以下,电流 10mA 检测连接器 A-B 区。 connectors, measure by dry circuit, 20mV MAX, 10mA. (JIS C5402 5. 4/ EIA-364-23)	Initial: 10 milliohms Max. After Test: 25 milliohms Max
5-2-2 绝缘阻抗 Insulation Resistance	在相邻端子,端子与地片之间,使用 500V 的直流电 1 分钟检测。 connectors, and Apply a voltage of DC 500V for 60±5 s to between Adjacent terminals and measure. (JIS C5402 5. 2/ EIA-364-21)	100 MΩ Min
5-2-3 耐电压 Dielectric Strength	在相邻端子,端子与地片之间,使用 500V 的交流电 1 分钟检测 connectors, Apply a voltage of AC500V for 60 ±5 s to between adjacent terminals. (JIS C5402 5. 1/ EIA-364-20)	无击穿现象 No Breakdown

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5-3. 机械的性能 Mechanical Performance.

项 目 【Item】	条 件 【Test Condition】	规 格 【Requirement】
5-3-1 PIN 保持力 PIN Retention Force	以每分钟 50±3mm 的速度; 拔出的力量。 connectors, pull the at a rate of 25 ±3mm per minute.(EIA-364-1)	1.5Kgf Min

5-4. 环境性能及其它 Environmental Performance and Others.

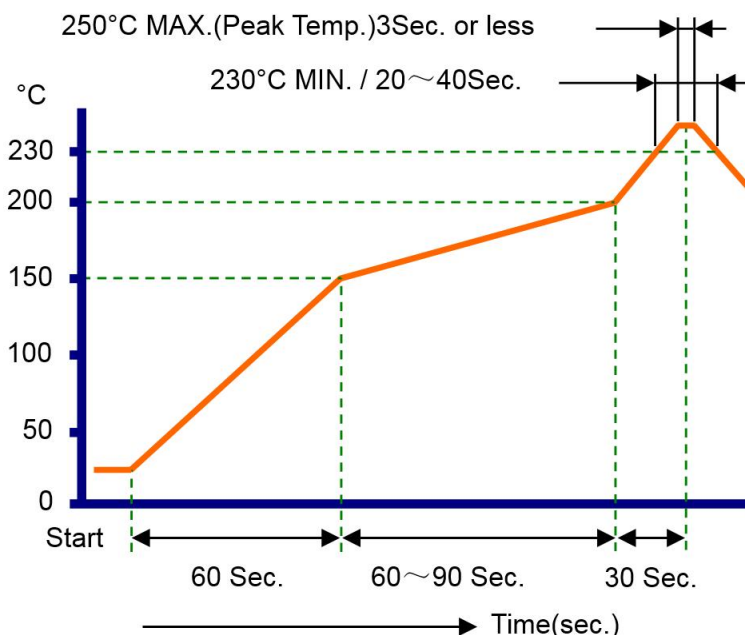
项 目 【Item】	条 件 【Test Condition】	规 格 【Requirement】
5-4-1 重复插拔 Repeated Insertion/ Withdrawal	无通电状态; 在小于 10 次/分钟的速度下,插拔 10 次 Insert and withdraw actuator up to 10cycles at the speed rate of less than 10cycles/minute.	接触阻抗 Contact Resistance 25 mΩ Max.
5-4-2 耐振动性 Vibration	在装配好工作状态下: 振幅: 1.5mm P-P 时间: 10-55-10 HZ in 1 minute 持续时间: 每轴向 2 小时 connectors and subject to the following vibration conditions, for period of 2 hours in each of 3 mutually perpendicular axes, passing DC 1mA during the test. Amplitude: 1.5mm P-P. Frequency: 10-55-10Hz in 1 minute. Duration : 2 hours in each of X,Y,Z axes. (MIL-STD-202 Method 201/ EIA-364-28)	外观 Appearance 无异状 No Damage
		接触阻抗 Contact Resistance 25 mΩ Max.
		瞬断 Discontinuity 1 μsec Max
5-4-3 冷热冲击 Cold and Thermal Shock	低温 -40±3°C, 高温 130±2°C 保持 30 分钟, 5 次循环, Subject mated connectors to 5 cycles between -40 ± 3°C and 130±2°C for 30 minutes. (EIA-364-32)	外观 Appearance 无异状 No Damage
		接触阻抗 Contact Resistance 25 mΩ Max.
		瞬断 Discontinuity 1 μsec Max

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5-4-4	耐湿性 Constant temperature and humidity	在 60±3°C, 相对湿度 90 - 95%的环境下 96 小时后, 放置在室温 1-2 小时 Expose to 60 ± 3°C, relative humidity 90 to 98% for 96 hours. After the test allowed to stand at room temperature for 1-2 hours. (MIL-STD-202F, Method: 103)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	25 mΩ Max.
			绝缘阻抗 Insulation Resistance	100 MΩ Min.
5-4-5	盐水喷雾 Salt Spray	将样品与连接, 暴露在以下条件下: 在温度 35±2°C NaCl 浓度 5±1% 盐水喷雾 48±4 小时 环境温度: 35 ± 2°C applicable connectors and expose to the following salt mist conditions. NaCl solution Concentration : 5 ± 1% Spray time :48 ±0.5 hours Ambient temperature : 35 ± 2°C (EIA-364-26B)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	25 milliohms Max
5-4-6	焊锡附着性 Solder-ability	焊接时间: 3±0.5 秒. 焊接温度: 245±5°C. Soldering Time: 3±0.5second. Solder Temperature: 245±5°C. (MIL-STD-202F, Method: 208)	浸锡 Solder Wetting	浸渍面积需 95%以上 95% of immersed area must show no voids, pin holes
5-4-7	焊锡耐热性 Solder-Resistance	回流焊请参考回流焊条件; 烙铁方法: 距离端子焊脚和固定片焊脚 0.2mm 焊接时间: 5 秒最大 焊接温度: 370 ~ 400°C 1) Soldering iron method 0.2mm from terminal tip and fitting nail tip. Soldering time: 5 seconds Max. Solder temperature : 370~400°C 2) When reflowing...Refer to paragraph 6.	外观 Appearance	无异状 No Damage
5-4-8	机械冲击 Mechnaical Shock	加电状态下测试: 6 个面各 3 次共 18 次半正弦波测试, 加速度 490m/S ² (50G), 冲击时间 11 毫秒. connectors, add to each 3 times with impact of 490 m/S ² on action time 11 milliseconds at 6 directions mutually vertical including fitting axis in DC 1m A electricity state. (MIL-STD-202F, Method:213)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	25 milliohms Max
			瞬断 Discontinuity	1 毫秒最大 1 microsecond max.
5-4-9	温度上升 Temperature rise	加载额定电流 5 小时 Mate connectors, test temperature rise of contact when the maximum AC rated current is passed.	温度上升 Temperature rise	30°C Max.

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5-4-10	耐热性 Heat Resistance	装在 130±3°C 环境下放置 96 小时, 然后置于室温放置 1-2 小时。 connectors, exposing for 96 hours in the atmosphere of 130±3 degree C. After the test allowed to stand at room temperature for 1-2 hours.	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	25 milliohms Max.
5-4-11	耐寒性 Cold resistance	装在 -40±3°C 环境下放置 96 小时, 然后置于室温放置 1-2 小时。 connectors, exposing for 96 hours in the atmosphere of -40±3 degree C. After the test allowed to stand at room temperature for 1-2 hours.	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	25 milliohms Max.

[6. SMT 回流条件 SMT REFLOW CONDITION]



Solder by hand temperature: 350°C, 3-5second

温度条件曲线图/ 基板上温度

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.

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【7.测试组 Test Group】

	Group A	Group B	Group C	Group D	Group E	Group F	Group G	Group H	Group I	Group J	Group K	Group L	Group M
Examination of Product	1,5	1,5	1,5	1,5	1,5	1,3	1,3	1,3	1,5	1,5	1,5	1,5	1,5
Contact Resistance	2,4	2,4	2,4	2,6	2,4			2,4	2,4	2,4	2,4	2,4	2,4
Insulation Resistance				3,7									
Dielectric Strength						2							
PIN Retention Force							2						
Repeated Actuator Insert/ With	3												
Vibration		3											
Cold and Thermal Shock			3										
Constant temp and humidity				4									
Salt Spray					3								
Solder-ability								2					
Resistance to Soldering Heat									3				
Mechnaical Shock										3			
Temperature rise											3		
Heat Resistance												3	
Cold resistance													3