



Product Specification [产品规格书]:	Document No	PS-2502-01
Subject [主题]: 2.50mm Pitch 2502 Series Connector Specification	Date Issued	2019/06/09
	Date Revised	2018/05/26
	Version	A0

This specification is referred to the 2.50mm series wire to board connector

## 索引【INDEX】

1. 适用范围【Scope】
2. 规格与料号【Spec and Part number】
3. 材质与表面处理【Disposal of Material and surface】
4. 额定等级【Ratings and applicable wires】
5. 性能【Performance】
  - 5-1. 电气的性能【Electrical Performance.】
  - 5-2. 机械的性能【Mechanical Performance】
  - 5-3. 环境性能及其它【Environmental Performance and Others】
6. 综合插入力及拔出力【Insertion/Withdrawal Force】



Product Specification [产品规格书]:

Document No

PS-2502-01

Subject [主题]:

Date Issued

2019/06/09

2.50mm Pitch 2502 Series Connector Specification

Date Revised

2018/05/26

Version

A0

### 【1.适用范围 Scope】

此种规格包括 2.50mm Pitch 2502 Series 连接器规格说明.

This Specification Covers the 2.50mm Pitch 2502 Series Connector Specification.

### 【2.规格与料号 Spec and Part number】

规格内容 Specification	产品料号 Production No.
端子/Terminal	2502T-PSN
胶壳/Housing	2502H-XX-N0HF
针座/Wafer	2502WV-XXX-LPSW

### 【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
端子/Terminal	磷铜/Phosphor Bronze	Tin Plated: Over 100 $\mu$ " .Nickel: Over 50 $\mu$ " .
胶壳/Housing	PA66	UL 94V-0
针座/Wafer	Base	LCP
	PIN	UL 94V-0
	黄铜/Brass	Over Tin 100 $\mu$ " Plated ; Over 50 $\mu$ " Nickel

(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℃~+105℃	
适用线径 Applicable wire insulation O.D	AWG 22#~28# Insulation O.D. 1.90mm(Max.)	

【 \*升温时含端子.Including terminal temperature rise. 】

Product Specification [产品规格书]:

Document No

PS-2502-01

Subject [主题]:

Date Issued

2019/06/09

2.50mm Pitch 2502 Series Connector Specification

Date Revised

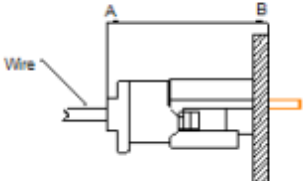
2018/05/26

Version

A0

## 【5.性能 PERFORMANCE】

### 5-1. 电气的性能 Electrical Performance.

项 目 【Item】	条 件 【Test Condition】	规 格 【Requirement】
5-1-1 接触阻抗 Contact Resistance	<p>公母配合,开放电压 20mV 以下,电流 10mA 检测连接器 A~B 区. Mate connectors, measure by dry circuit, 20mV MAX, 10mA. (Based upon EIA-364-06A).</p> 	<p>Initial: 20 milliohms Max. After Test: 30 milliohms Max.</p>
5-1-2 绝缘阻抗 Insulation Resistance	<p>公母配合,在相邻端子,端子与地片之间,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-364-21B / MIL-STD-202 Method 302 Cond.B)</p>	1000 Megohms Min.
5-1-3 耐电压 Dielectric Strength	<p>公母配合,在相邻端子,端子与地片之间,使用 1000V 的交流电 1 分钟,检测连接器. Mate connectors, apply 1000V AC for 1 minute between adjacent terminal or ground. (Based upon EIA-364-20A / MIL-STD-202 Method 301)</p>	不出现中断等情况 No Breakdown and Flashover
5-1-4 铆线后端子接 触阻抗 Contact resistance on crimped portion	<p>铆线后之端子,开放电压 20mV 以下,电流 10mA 检测连接器. Crimp the applicable wire on to the terminal measure by dry circuit 20mV MAX, 10mA.</p>	10 milliohms Max.



Product Specification [产品规格书]:

Document No

PS-2502-01

Subject [主题]:

Date Issued

2019/06/09

2.50mm Pitch 2502 Series Connector Specification

Date Revised

2018/05/26

Version

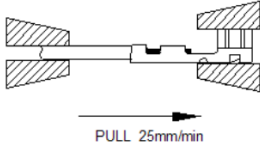
A0

## 5-2. 机械的性能 Mechanical Performance.

项 目 【Item】		条 件 【Test Condition】	规 格 【Requirement】
5-2-1	插拔力 Insertion & Retention Force	以每分钟 25.4±3mm 的速率插入和拔出. Insert and withdraw Connectors at the speed rate of 25.4±3mm/minute.	参照第 6 项 Refer to paragraph 6
5-2-2	端子保持力 Terminal/ Housing Retention Force	以每分 25.4±3mm 的速率,将端子从 Housing 内轴向拔出的力量. Apply axial pull out force at the speed rate of 25.4±3mm/minute on the terminal assembled in the housing.	14.7N {1.5kgf} Min.
5-2-3	端子插入力 Terminal Insertion Force	铆线后之端子插入Housing所需最大力量. Insert the crimped terminal into the housing.	14.7N {1.5kgf} Max.
5-2-4	Pin 针保持力 Pin Retention Force	以每分 25.4±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 25.4±3mm/minute.	9.8N {1.0kgf} min.



Product Specification [产品规格书]:	Document No	PS-2502-01
Subject [主题]: 2.50mm Pitch 2502 Series Connector Specification	Date Issued	2019/06/09
	Date Revised	2018/05/26
	Version	A0

项 目 【Item】	条 件 【Test Condition】	规 格 【Requirement】
5-2-5 端子压着强度 (Crimped connections)	固定铆线后的端子, 使电线与端子分离时所需的最小力量。 Fix the crimped terminal, apply axial pull out force on the wire. (Do not crimp insulation part). 	AWG#   #22   #24   #26   #28 Spec.   5.0   3.0   2.0   1.0 .kgf. Min.
		Note> As for unspecified wire sizes in this specification define values with clients

### 5-3. 环境性能及其它 Environmental Performance and Others.

项 目 【Item】	条 件 【Test Condition】	规 格 【Requirement】
5-3-1 重复插拔 Repeated Insertion/Withdrawal	以每分钟不超过 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.	接触阻抗 Contact Resistance 40 milliohms Max.
5-3-2 温升测试 Temperature Rise	公母对插后,在通过额定电流下,所测定的温度。 Carrying rated current load. (UL 1977)	温升测试 Temperature rise 30℃ Max.
5-3-3 耐振动性 Vibration	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
		接触阻抗 Contact Resistance 40 milliohms Max.
		瞬断 Discontinuity 1 micro-second Max.
5-3-4 耐冲击性 Shock	在 X.Y.Z 上 6 个方向上,以 490m/s <sup>2</sup> (50g 的力量)冲击下各 3 回 .490m/s <sup>2</sup> {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
		接触阻抗 Contact Resistance 40 milliohms Max.
		瞬断 Discontinuity 1 micro-second Max.





Product Specification [产品规格书]:			Document No	PS-2502-01
Subject [主题]: 2.50mm Pitch 2502 Series Connector Specification			Date Issued	2019/06/09
			Date Revised	2018/05/26
			Version	A0
项 目 【Item】		条 件 【Test Condition】	规 格 【Requirement】	
5-3-5	耐热性 Heat Resistance	105±2℃,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.
5-3-6	耐寒性 Cold Resistance	-40±5℃,96 hours. ( Based upon EIA-364-105)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	40 milliohms Max.
5-3-7	耐湿性 Humidity	温度: 40±2℃ 湿度: 90~95%(RH) 持续时间: 96 hours Temperature: 40±2℃ 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.
			耐电压 Dielectric Strength	Must meet 5-1-3
			绝缘阻抗 Insulation Resistance	500 Megohms Min.
5-3-8	温度变化 Temperature Cycling	从-40℃持续30分鍾升至+105℃持续30分鍾, 循环5次. 5 cycles of: a) -40℃ 30 minutes. b) +105℃ 30 minutes. (Based upon EIA-364-32B)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	40 milliohms Max.
5-3-9	盐水喷雾 Salt Spray	在温度 35±2℃,盐水浓度 5±1%下,盐水喷雾 24±1 小时. 24±1 hours exposure to a salt spray from the 5±1% solution at 35±2℃. (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.
5-3-10	焊锡附着性 Solder-ability	焊接时间: 3~5 秒. 焊接温度: 245±5℃. Soldering Time: 3~5second. Solder Temperature: 245±5℃. (Based upon EIA-364-52)	Solder Wetting	浸渍面积需 95%以上 95% of immersed area must show no voids, pin holes.
WRITTEN BY:Yangzhengguo		APPROVED BY: Lvtiansheng	Sheet: 6 of 7	



Product Specification [产品规格书]:

Document No

PS-2502-01

Subject [主题]:

Date Issued

2019/06/09

2.50mm Pitch 2502 Series Connector Specification

Date Revised

2018/05/26

Version

A0

项 目 【Item】		条 件 【Test Condition】	规 格 【Requirement】	
5-3-11	焊锡耐热性 Solder-Resistance	焊接时间: 3~5 秒. 焊接温度: 255+5/-5℃. Soldering time:3~5 sec solder. Temperature:255+5/-5℃. (Based upon EIA-364-56A)	外观 Appearance	无异状 No Damage

【6.综合插入力及拔出力 INSERTION/WITHDRAWAL FORCE】<Connector mating force>

PIN 数 No. of CKT	初次插入力(最大值) First Insertion (kgf Max.)	30 次拔出力(最小值) 30 <sup>th</sup> Withdrawal (kgf Min.)	PIN 数 No. of CKT	初次插入力(最大值) First Insertion (kgf Max.)	30 次拔出力(最小值) 30 <sup>th</sup> Withdrawal (kgf Min.)
03	4.40	0.60	05	6.00	0.70
04	5.20	0.65			

注: 以上插拔次数为 30 次

Note: Insertion and Withdrawal for 30Cycles