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Product Specification [产品规格书]:	Document No	PS-2508-01
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This specification is referred to the 2.50mm series wire to board connector

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#### 【1.适用范围 Scope】

此种规格包括 2.50mm Pitch 2508 Series 连接器规格说明.

This Specification Covers the 2.50mm Pitch 2508 Series Connector Specification.

#### 【2.规格与科号 Spec and Part number】

规格内容	产品料号	产品图示
Specification	Production No.	Picture of Product
端子/Terminal	2508T-PSN1	NONE
胶壳/Housing	2508H-XX-N0	NONE
	2508WR-XXX-9TSW	
针座/Wafer	2508WV-XXX-9TSW	NONE
FI Æ/ Waler	2508WVS-XX-9TSWR	NONE
	2508WRS-XX-9TSWR	

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

S. M.M. TALELAND OF PROCESSION					
規格内容		材质	表面处理		
Specification		Materials	Disposal of Surface		
端子/Terminal		磷铜/Phosphor Bronze	锡/Tin80~200μ".镍/Ni:40~120μ"		
胶壳/Hou	sing	PA66	UL 94V-0		
	Base	PA9T	UL 94V-0		
针座/Wafer	PIN	黄铜/Brass	锡/Tin80~200μ".镍/Ni:40~120μ"		
	Solder tab	黄铜/Brass	锡/Tin80~200μ".镍/Ni:40~120μ"		

## (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	FA C/D Cl	
额定电流 Rated Current (Max.)	3A	[AC/DC]	
使用温度范围 Ambient temperature Range	-40°C∼+105°C		
适用线径 Applicable wire insulation O.D	AWG#22~26 (0.35~0.13 mm²)	绝缘ø O.D: 1.60mm(Max.)	

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

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## 【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	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).	Initial: 10 milliohms Max. After Test: 20 milliohms Max.
5-1-2	绝缘阻抗 Insulation Resistance	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)	1000 Megohms Min.
5-1-3	耐电压 Dielectric Strength	公母配合,在相邻端子,端子与地片之间,使用 1000V 的交流电 1分锤,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)	外观无损伤,无跳火
5-1-4	铆线后端子接触阻 抗 Contact resistance on crimped portion	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.	10 milliohms Max.

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#### 5-2. 机械的性能 Mechanical Performance.

	项目 条件 規格					
	【Item 】	Test Condition	[Requirement]			
5-2-1	插拔力 Insertion & withdraw Force	以每分锺 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.  Housing  Wire  Force: F	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.	9.8N {1.0kgf} 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.				
5-2-5	Lock 保持力 Lock Retention Force	将 Housing 与 Wafer 匹配后,将 Housing 从 Wafer 内轴 向拔出的力量,看其卡扣的承受力量 A housing and a header shall be mated, Pulling load shall be applied them, the load to make them come off each other shall be measured  Header Housing  Header Housing	1、2-circuit product:			

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	项 目	条件		规	格	
	[Item] [Test Condition] [Requirement]					
		固定铆线后的端子, 使电线与端子分离时所需的最小力量.	AWG 线号	#22	#24	#26
		Fix the crimped terminal, apply axial pull out force on the	<b>(</b> 平方	(0.35mm <sup>2</sup>	(0.22m	
		wire. (Do not crimp insulation part)	毫米)	)	m²)	(0.13mm <sup>2</sup> )
			Spec.kgf	4.0	2.0	2.0
5-2-5	端子压着强度		Min.	Min. 4.0 3.0	2.0	
	Crimped contact			or unspecit		sizes in this ith clients

	项 目 【Item】	条 件 【Test Condition】	规 【Require	格 ement】
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.	接触阻抗 Contact Resistance	20 milliohms Max.
5-3-2	温升测试 Temperature Rise	公母连接器配合后,加载额定电流直到温度上升到稳定 状态,然后再测量温升(EIA364-70,Method 1) Mating connectors shall be energized at rating current until thermal stability is achieved, and then measured the termperature rise. (EIA364-70,Method 1)	_	30°C Max.
	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
5-3-3		振动测试 Amplitude: 1.5mm P-P Sweep time: 10~55~10 HZ in 1 minute	接触阻抗 Contact Resistance	20 milliohms Max.
		瞬断 Discontinuity	1 micro- second Max.	
			外观	无异状
		在X.Y.Z上6个方向上,以490m/s²(50g的力量)冲击下各	Appearance	No Damage
	冲击测试	3 回.490m/s²{50G}, 3 strokes in each X.Y.Z. axes.	接触阻抗	
5-3-4	Shock test (Based upon EIA-364-27B/MIL-STD-202 Method 213B Cond.A)	Contact Resistance	20 milliohms Max.	
			瞬断	1 micro-
			Discontinuity	second Max.

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

	项 目 【Item】	条 件 【Test Condition】	规 格 【Requiremen	
5-3-5	耐热性 Heat Resistance	105±2℃,96 hours. (Based upon MIL-STD-202 Method 108A Cond.A)	外观 Appearance 接触阻抗 Contact Resistance	无异状 No Damage 20 milliohms Max.
5-3-6	耐寒性 Cold Resistance	-40±3°C,96 hours. ( Based upon EIA-364-105)	外观 Appearance 接触阻抗 Contact Resistance	无异状 No Damage 20 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 接触阻抗 Contact Resistance 耐电压 Dielectric Strength 绝缘阻抗 Insulation Resistance	无异状 No Damage 20 milliohms Max. Must meet 5-1-3 500 Megohms Min.
5-3-8	温度变化 Temperature Cycling	从-40℃持续 30 分锤升至+105℃持续 30 分锤,循环 25 次。 25 cycles of: a) -40±3℃ 30 minutes. b) +105±2℃ 30 minutes. (Based upon EIA-364-32B)	外观 Appearance 接触阻抗 Contact Resistance	无异状 No Damage 20 milliohms Max.

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		在温度 35±2℃,盐水浓度 5±1%下,盐水喷雾 48±1 小	外观	无异状
5-3-9	盐水喷雾 Salt Spray	时.	Appearance	No Damage
		48±1 hours exposure to a salt spray from the 5±1%		
		solution at 35±2℃.	接触阻抗	
		(Based upon EIA-364-26B/MIL-STD-202 Method 101D	Contact	20 milliohms Max.
		Cond.B).	Resistance	
	焊接时间: 3~5 秒. 焊接温度: 245±5℃. Solder- ability Solder Temperature: 245±5℃. (Based upon EIA-364-52)	焊接时间: 3~5 秒		浸渍面积需 95%
				以上
5-3-10		7,50	Solder Wetting	95% of immersed
3 3 10			Solder Wetting	area must show
		'		no voids, pin
		(basea apon Lin 30 i 32)		holes.

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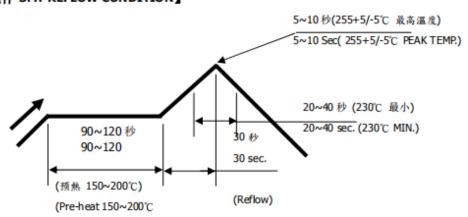
	项 目	条 件	規	格
[Item]		[Test Condition]	[Requirement]	
5-3-11		焊接时间: 5~10 秒.		
	焊锡耐热性	焊接温度: 255+5/-5℃.	外观 Appearance	无异状 No Damage
	Solder- Resistance	Soldering time: 5~10 sec solder.		
		Temperature:255+5/-5℃.	Appearance	No Dallage
		(Based upon EIA-364-56A)		

#### 【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.)
Single	1	1	09	6.75	0.90
02	1.70	0.20	10	7.50	1.00
03	2.25	0.30	11	8.25	1.10
04	3.00	0.40	12	9.00	1.20
05	3.75	0.50	13	9.75	1.30
06	4.50	0.60	14	10.50	1.40
07	5.25	0.70	15	11.25	1.50
08	6.00	0.80			

注: 以上插拔次数为 30 次 Note: Insertion and Withdrawal for 30Cycles

### 【7. SMT 回流条件 SMT REFLOW CONDITION】



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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