Product Specification [产品规格书]:	ISSUED BY:	Engineering Dept
Subject [主题]:	Date Issued	2010/11/13
1.25mm Pitch 1255 Series Connector Specification	Date Revised	2016/02/16

This specification is referred to the 1.25mm series wire to board connector

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# 【1.适用范围 Scope】

此种规格包括 1.25mm Pitch 1255 Series 连接器规格说明.

This Specification Covers the 1.25mm Pitch 1255 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
端子/Terminal	1255T-PXX	NONE
胶壳/Housing	1255H-1XXX-N0 1255H-XXX-N0	NONE
针座/Wafer	1255WRS-1XX-XXXX 1255WRS-XX-XXXX	NONE

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

规格内容		材 质	表面处理
Specific	ation	Materials	Disposal of Surface
端子/Ter	minal	磷铜/Phosphor Bronze	1. Nickel: Over 30μ". Tin: Over 70μ".
如一丁/ TEI	IIIIIai	19年刊9/FITOSPITOL DIOLIZE	2.Gold- Plated: 1~3u" Nickel: Over 30µ"
胶壳/Housing		PA66	UL 94V-0
	Base	High Temperature Plastic	UL 94V-0
针座/Wafer	PIN	黄铜/Brass	1. Gold Flash / Over 30μ" Nickel 2. Over Tin 70μ" / Over 30μ" Nickel
	Solder tab	黄铜/Brass	Over Tin 70µ" Plated / Over 30µ" 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.)	200V	[AC/DC]	
额定电流 Rated Current (Max.)	1A	[AC/DC]	
使用温度范围 Ambient temperature Range	e -40°C~+85°C		
适用线径 Applicable wire insulation O.D	AWG 28#、30#、32# Insulation O.D. 0.90mm(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 条 件 规 格				
	【Item】	【Test Condition】	【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: 40 milliohms Max. After Test: 80 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)	100 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500V的交流电1分锺,检测连接器. Mate connectors, apply 500V AC for 1 minute between adjacent terminal or ground. (Based upon EIA-364-20A / MIL-STD-202 Method 301)	不出现中断等情况 No Breakdown and Flashover	
5-1-4	Contact	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.

<u></u>	5-2. 机械的性能 Mechanical Performance.					
	【Item】	【Test Condition】	【Requirement】			
5-2-1	插拔力 Insertion & Retention 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.	4.9N {0.5kgf} 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.	4.9N {0.5kgf} 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.  PUSH	2.94N {0.30kgf} min.			



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		项 目	条件	规		格		
	ľ	【Item】	【Test Condition】	【Requ	irem	ent ]		
	端子压着强度 <sub>5-2-5</sub> Tensile strength	固定铆线后的端子,使电线与端子分离时所	AWG#	#28	#30	#32	İ	
[		porce on the wire. (Do not ching institution	Spec.kgf. Min.	1.0	0.5	0.3		
(Crimped connections)	PULL	Note> As for sizes in this define valu	s spec	ificati	ion			

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

5-3. 外現住能及其它 Environmental Performance and Others.					
项 目		条件	规格		
【Item】		Test Condition	【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 50 次. When mated up to 50 cycles repeatedly by the rate of 10 cycles per minute.	接触阻抗 Contact Resistance	80 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°C Max.	
	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	
5-3-3			接触阻抗 Contact Resistance	80 milliohms Max.	
			瞬断 Discontinuity	1 micro- second Max.	
	耐冲击性 Shock	Shock	外观	无异状	
			Appearance	No Damage	
5-3-4			接触阻抗 Contact	80 milliohms Max.	
		strokes in each X.Y.Z. axes.	Resistance		
		(Based upon EIA-364-27B/MIL-STD-202)	瞬断	1 micro-	
		Method 213B Cond.A)	Discontinuity	second Max.	



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		时热性	85±2°C,96 hours.	外观 Appearance	无异状 No Damage
	5-3-5		(Based upon MIL-STD-202 Method 108A Cond.A)	接触阻抗 Contact Resistance	80 milliohms Max.
	5-3-6	耐寒性 Cold Resistance	-25±5°C,96 hours. ( Based upon EIA-364-105)	外观 Appearance 接触阻抗 Contact Resistance	无异状 No Damage 80 milliohms Max.
		耐湿性 Humidity	温度: 40±2℃	外观 Appearance	无异状 No Damage
			湿度: 90~95%(RH) 持续时间: 96 hours	接触阻抗 Contact Resistance	80 milliohms Max.
	5-3-7		Temperature: 40±2°C Relative Humidity: 90~95%	耐电压 Dielectric Strength	Must meet 5-1-3
			Duration: 96 hours (Based upon EIA-364-31A/MIL-STD-202 Method 103B Cond.B)	绝缘阻抗 Insulation Resistance	100 Megohms Min.
5-3			从-55℃持续 30 分锺升至+85℃持续 30 分锺,	外观 Appearance	无异状 No Damage
	温度变化 5-3-8 Temperature Cycling	Temperature	循环 5 次. 5 cycles of: a) -55°C 30 minutes. b) +85°C 30 minutes. (Based upon EIA-364-32B)	接触阻抗 Contact Resistance	80 milliohms Max.
		5-3-9	在温度 35±2℃,盐水浓度 5±1%下,盐水喷雾 24±1 小时.	外观 Appearance	无异状 No Damage
	5-3-9		24±1 hours exposure to a salt spray from the 5±1% solution at 35±2°C.  (Based upon EIA-364-26A/MIL-STD-202 Method 101D Cond.B).	接触阻抗 Contact Resistance	80 milliohms Max.

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			焊接时间: 5±0.5 秒.		浸渍面积需	
		写得例看性 Solder-	焊接温度: 245±5℃.	Solder Wetting	95%以上 95% of	
	5-3-10		Soldering Time: 5±0.5second.		immersed area	
			Solder Temperature: 245±5°C.		must show no voids, pin	
			(Based upon EIA-364-52)		holes.	



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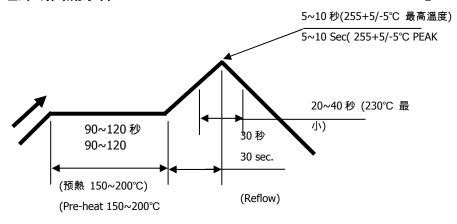
项 目		条 件	规	格
【Item】		【Test Condition】	【Require	ement】
5-3-11	焊锡耐热性	焊接时间: 5~10 秒. 焊接温度: 255+5/-5°C. Soldering time:5~10 sec solder. Temperature:255+5/-5°C. (Based upon EIA-364-56A)	外观 Appearance	无异状 No Damage

# 【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 次拨出力(最小值) 30 <sup>th</sup> Withdrawal (kgf Min.)
2	0.4	0.08	9	1.8	0.36
3	0.6	0.12	10	2.0	0.4
4	0.8	0.16	20	4.0	0.8
5	1.0	0.20	21	4.2	0.84
6	1.2	0.24	30	6.0	1.20
7	1.4	0.28	41	8.2	1.64
8	1.6	0.32	51	10.2	2.04

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

#### 【7. SMT 红外线回流条件 SMT INFRARED 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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