

Product Specification [产品规格书]:	ISSUED BY:	Engineering Dept
Subject [主题]:	Date Issued	2013/07/26
1.27mm Pitch 9127 Series Connector Specification	Date Revised	2014/01/09

This specification is referred to the 1.27mm series IDC connector

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#### 【1.适用范围 Scope】

此种规格包括 1.27mm Pitch 9127 Series 连接器规格说明.

This Specification Covers the 1.27mm Pitch 9127 Series Connector Specification.

### 【2.规格与料号 Spec and Part number】

规格内容	产品料号	产品图示
Specification	Production No.	Picture of Product
胶壳/Housing	9127HI-XXX-XXXX	NONE
针座/Wafer	9127WV-XXXX-XXXX 9127WR-XXXX-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
Specification		Materials	Disposal of Surface
线端/Housing Termina		黄铜/Brass	Over Tin 70μ″ Plated ; Over 30μ″ Nickel
线编/Housing	Base	PBT	UL 94V-0
Eligit Massay	Base	High Temperature Plastic	UL 94V-0
针座/Wafer	PIN	磷铜/Phosphor Bronze	Tin Plated: Over 70μ″. Nickel: Over 30μ″

<sup>(</sup>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.)	230V		
额定电流 Rated Current (Max.)	1.5A	[AC/DC]	
使用温度范围 Ambient temperature Range	e -40°C~+105°C		
适用线径 Applicable wire insulation O.D	UL2651 AWG 28# Insulation O.D. 0.80mm(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100V的直流电,检测连接器. Mate connectors, apply 100V 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)	and Flashover



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### 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	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 Okaf} min

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

	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50 次. When mated up to 50 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.

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项 目 【Item】		条   件 【Test Condition】	规 格 【Requirement】		
		振幅: 1.5mm P-P 时间: 10~55~10 HZ in 1 minute	外观 <b>Appearance</b>	无异状 No Damage	
5-3-3	耐振动性 Vibration	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.	接触阻抗 Contact Resistance	20 milliohms Max.	
		(Based upon EIA-364-28B/MIL-STD-202 Method 213B Cond.A)	瞬断 Discontinuity	1 micro- second Max.	
		在 X.Y.Z 上 6 个方向上,以 490m/s <sup>2</sup> (50g 的	外观 <b>Appearance</b>	无异状 No Damage	
5-3-4	耐冲击性 Shock	力量)冲击下各 3 回.490m/s <sup>2</sup> {50G}, 3 strokes in each X.Y.Z. axes.	接触阻抗 Contact Resistance	20 milliohms Max.	
		(Based upon EIA-364-27B/MIL-STD-202 Method 213B Cond.A)	瞬断 Discontinuity	1 micro- second Max.	
5-3-5			外观	无异状	
	耐热性	85±2°C,96 hours.	Appearance	No Damage	
	Heat Resistance	(Based upon MIL-STD-202 Method 108A	接触阻抗	20 milliohms	
	Resistance	Cond.A)	Contact Resistance	Max.	
			外观	无异状	
	耐寒性 Cold Resistance	-25±5°C,96 hours. ( Based upon EIA-364-105)	Appearance	No Damage	
5-3-6			接触阻抗	20 milliohms Max.	
			Contact Resistance		
		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	20 milliohms Max.	
5-3-7	耐湿性 Humidity	Temperature: 40±2°C	耐电压 Dielectric Strength	Must meet 5-1-3	
		Relative Humidity: 90~95%  Duration: 96 hours  (Based upon EIA-364-31A/MIL-STD-202  Method 103B Cond.B)	绝缘阻抗 Insulation Resistance	500 Megohms Min.	



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项 目 【Item】		条 件 【Test Condition】	规 格 【Requirement】	
5-3-8	温度变化 Temperature Cycling	从-55℃持续 30 分锺升至+85℃持续 30 分 锺 <b>,</b> 循环 5 次.	外观 Appearance	无异状 No Damage
		5 cycles of: a) -55°C 30 minutes.	接触阻抗 Contact	20 milliohms Max.
		b) +85°C 30 minutes. (Based upon EIA-364-32B)	Resistance	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	外观 Appearance	无异状 No Damage
		雾 24±1 小时. 24±1 hours exposure to a salt spray		
		from the 5±1% solution at 35±2°C.	接触阻抗 Contact	20 milliohms Max.
		(Based upon EIA-364-26A/MIL-STD-202 Method 101D Cond.B).	Resistance	
	焊锡附着性 Solder- ability	焊接时间: 3±0.5 秒.		浸渍面积需 95%以上 95% of immersed area must show no voids, pin holes.
		焊接温度: 245±5℃.		
5-3-10		Soldering Time: 3±0.5second.	Solder Wetting	
		Solder Temperature: 245±5°C.		
		(Based upon EIA-364-52)		
	焊锡耐热性 Solder- Resistance	焊接时间: 3~5 秒.		无异状 No Damage
5-3-11		焊接温度: 260+5/-5℃.	外观	
		Soldering time:3~5 sec solder.	Appearance	
		Temperature:260+5/-5°C.		
		(Based upon EIA-364-56A)		



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### 【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.)
04	2.00	0.40	16	8.00	1.60
06	3.00	0.60	18	9.00	1.80
08	4.00	0.80	20	10.00	2.00
10	5.00	1.00	22	11.00	2.20
12	6.00	1.20	24	12.00	2.40
14	7.00	1.40			

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