DONGGUAN HANHAO PRECISION ELECTRONIC CO., LTD

Product Specification [产品规格书]:	ISSUED BY:	Engineering Dept
Subject [主题]:	Date Issued	2013/03/15
2.00mm Pitch 2017 Series Connector Specification	Date Revised	2013/07/30

This specification is referred to the 2.00mm series wire to board connector

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【1.适用范围 Scope】

此种规格包括 2.00mm Pitch 2017 Series 连接器规格说明.

This Specification Covers the 2.00mm Pitch 2017 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
胶壳/Housing	2017H-2*XX 2017HA-2*XX	NA
针座/Wafer	2017WA-2*XX 2017WRA-2*XX 2017WB-2*XX 2017WRB-2*XX	NA

【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
胶壳/Housing 端子 塑胶		磷铜/Phosphor Bronze 黄铜/Brass	Gold Plated Nickel: Over 30µ"
		PBT	UL 94V-0
针 lite //Mafar	Base	PBT/High Temp Plastic	UL 94V-0
针座/Wafer	PIN	黄铜/Brass	Gold 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.)	250V	[AC/DC]
额定电流 Rated Current (Max.)	2A	[AC/DC]
使用温度范围 Ambient temperature Range	-25 ℃	~+85℃
适用线径 Applicable wire insulation O.D	AWG 30# Insulati	on O.D. 1.13mm(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: 20 milliohms Max. After Test: 30 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分锺,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)	不出现中断等情况 No Breakdown 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】
	插拔力	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.	
5-2-1	Insertion & Retention Force	W.F I.F	参照第 6 项 Refer to paragraph 6
5-2-2	Pin 针保持力	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.	
3 2 2	Pin Retention Force		7.0TH TO.ORGI J IIIIII.

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30 次. When mated up to 30 cycles repeatedly by the rate of 10 cycles per minute.	接触阻抗 Contact	30 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.

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		条件		格	
ツロログ		不 【Test Condition】	Require	* * *	
5-3-3 耐振		振幅: 1.5mm P-P 时间: 10~55~10 HZ in 1 minute	外观 Appearance	无异状 No Damage	
	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	30 milliohms Max.	
		(Based upon EIA-364-28B/MIL-STD-202 Method 213B Cond.A)	瞬断 Discontinuity	1 micro- second Max.	
5-3-4		在 X.Y.Z 上 6 个方向上,以 490m/s ² (50g 的	外观 Appearance	无异状 No Damage	
	耐冲击性 Shock	力量)冲击下各 3 回.490m/s ² {50G}, 3 strokes in each X.Y.Z. axes.	接触阻抗 Contact Resistance	30 milliohms Max.	
		(Based upon EIA-364-27B/MIL-STD-202 Method 213B Cond.A)	瞬断 Discontinuity	1 micro- second Max.	
5-3-5	耐热性	85±2 ℃ ,96 hours.	外观 Appearance	无异状 No Damage	
	Heat Resistance	(Based upon MIL-STD-202 Method 108A Cond.A)	接触阻抗 Contact Resistance	30 milliohms Max.	
			外观	无异状	
	耐寒性 Cold Resistance	old $\begin{bmatrix} -25\pm5 & ? & 96 \text{ nours.} \end{bmatrix}$	Appearance	No Damage	
5-3-6			接触阻抗 Contact Resistance	30 milliohms Max.	
5-3-7	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	30 milliohms Max.	
		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】	
温度变化 5-3-8 Temperature Cycling		从-55℃持续 30 分锺升至+85℃持续 30 分锺, 循环 5 次.	外观 Appearance	无异状 No Damage
	5 cycles of: a) -55 $^{\circ}$ 30 minutes. b) +85 $^{\circ}$ 30 minutes. (Based upon EIA-364-32B)	接触阻抗 Contact Resistance	30 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. 盐水喷雾 24±1 hours exposure to a salt spray from	外观 Appearance	无异状 No Damage	
Salt Spray	the $5\pm1\%$ solution at $35\pm2\%$. (Based upon EIA-364-26A/MIL-STD-202 Method 101D Cond.B).	接触阻抗 Contact Resistance	30 milliohms Max.	
5-3-10	焊锡附着性 Solder- ability	焊接时间: 3±0.5 秒. 焊接温度: 245±5℃. Soldering Time: 3±0.5second. 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.
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>

10.综合描入(方)及级面方 TNSERTION/WITTIDRAWAETORCE / Confidence That ing Torce /					
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 th 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 th Withdrawal (kgf Min.)
06	1.80	0.24	30	9.00	1.20
08	2.40	0.32	32	9.60	1.28
10	3.00	0.40	34	10.20	1.36
12	3.60	0.48	36	10.80	1.44
14	4.20	0.56	38	11.40	1.52
16	4.80	0.64	40	12.00	1.60
18	5.40	0.72	44	13.20	1.68
20	6.00	0.80	50	15.00	1.76
22	6.60	0.88	60	18.00	1.84
24	7.20	0.96	64	19.20	1.92
26	7.80	1.04	68	20.40	2.00
28	8.40	1.12			

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

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