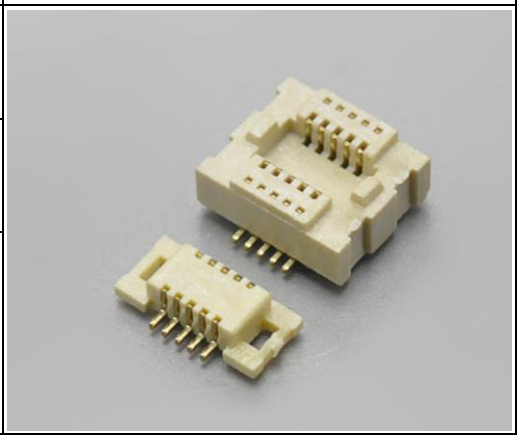
KONNRA®	东莞市康瑞电子有限公司	
Product Specification(产品规格书)		**Issued By: Engineering Dept.**
Subject (主题): 0.50mm Pitch KR0500 Series Connector Specification	**Date Issued**	2022/2/26
	Date Revised	2022/2/26
Document Number： PS-KR0500-01	**Revised /Edition**	A1

1.0 适用范围 (Scope)

此种规格包括0.50mm Pitch KR0500 Series 连接器规格说明.

This Specification Covers the 0.50mm Pitch KR0500 Series Connector Specification.

2.0 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	None	
端子/Terminal	None	
针座/Wafer	C0500VS2**13G0101RB C0500VS2**13G0102RB	

3.0 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**
胶壳/Housing			N/A	N/A
端子/Terminal			N/A	N/A
针座/ Wafer	立式 Straight (SMT 180°)	主体 Base	LCP	UL94 V-0
		导体 Contact	Brass	Gold plated over nickel
		固定片 Solder tab	N/A	N/A
	卧式 Right Angle (SMT 90°)	主体 Base	N/A	N/A
		导体 Contact	N/A	N/A
		固定片 Solder tab	N/A	N/A

(以上参数请以工程图为准/Please Refer to the Project drawing for the above Specification)

4.0 额定等级 (Ratings and applicable wires)

项 目 Item	规 格 Standard	
额定电压Rated Voltage (Max.)	50V	AC/DC
额定电流Rated Current (Max.)	0.5A	
使用温度范围Ambient temperature Range	-40℃~+105℃	
适用线径Applicable wire insulation O.D	None	

5.0 电气性能 (Electrical Performance)

项 目 Item		条 件 Test Condition	规 格 Requirement
5.1	接触阻抗 Contact Resistance	公母配合,开放电压20mV 最大,电流100mA最大检测连接器A~B 区. Mate connectors, measure by dry circuit, 20mV MAX, 100mA MAX. (Based upon EIA-364-23C)	40 milliohms Max.
5.2	绝缘阻抗 Insulation Resistance	公母配合,对相邻两接触导体,于1分钟内施加500V 的直流电,并量测其间绝缘阻抗. Mate connectors, apply 500V DC for 1 minute between adjacent contacts to measure the insulation resistance. (Based upon EIA-364-21B)	500 Megohms Min.
5.3	耐电压 Dielectric Strength	公母配合,在相邻端子或端子与接地端之间,使用200V 的交流电1 分钟,检测连接器. Mate connectors, apply 200V AC for 1 minute between adjacent terminal or ground. (Based upon EIA-364-20A)	无损毁或出现电火花 No Breakdown and Flashover

6.0 机械性能 (Mechanical Performance)

项 目 Item		条 件 Test Condition	规 格 Requirement
6.1	插拔力 Insertion& Withdrawal Force	以每分钟25.4±3mm的速率插入和拔出.(不包含卡榫结合力) Insert and withdraw connectors at the speed rate of 25.4±3mm/minute. (Excluding plastic detents) (Based upon EIA-364-13D)	参照第8.0项 Refer to paragraph 8.0
6.2	Pin 针保持力 Pin Retention Force	以每分钟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.	0.15 kgf (1.47 N) min.

7.0 环境性能及其它 (Environmental Performance and Others)

项 目 Item		条 件 Test Condition	规 格 Requirement	
7.1	耐久性 Durability	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. (Based upon EIA-364-09C)	接触阻抗 Contact Resistance	50 milliohms Max.
7.2	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. (Based upon EIA-364-70B)	温升测试 Temperature rise	30℃ Max.
7.3	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)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	50 milliohms Max.
			瞬断 Discontinuity	1 micro-second Max.

项 目 Item		条 件 Test Condition	规 格 Requirement	
7.4	耐冲击性 Shock	在 X.Y.Z 上 6 个方向上,以 490m/s2(50g的力量) 冲击下各 3 回. 490m/s2{50g}, 3strokes in each X.Y.Z. axes.(Based upon EIA-364-27B)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	50 milliohms Max.
			瞬断 Discontinuity	1 micro-second Max.
7.5	耐热性 Heat Resistance	105±2℃,96 hours. (Based upon EIA-364-17B)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	50 milliohms Max.
7.6	耐寒性 Cold Resistance	-40±2℃,96 hours. (Based upon EIA-364-59)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	50 milliohms Max.
7.7	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-364-31B)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	50 milliohms Max.
			耐电压 Dielectric Strength	Must meet 5.3
7.8	热冲击 Thermal shock	以-40℃持续30 分钟经室温5分钟,而后以 105℃持续30 分钟再经室温5分钟为一个循环,共循环5 次. One Cycle Consists Of: -40℃ for 30 minutes. → Room Temp. 5 minutes, +105℃ for 30minutes. → Room Temp. 5 minutes Total Cycles: 5 Cycles. (Based upon EIA-364-32B)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	50 milliohms Max.

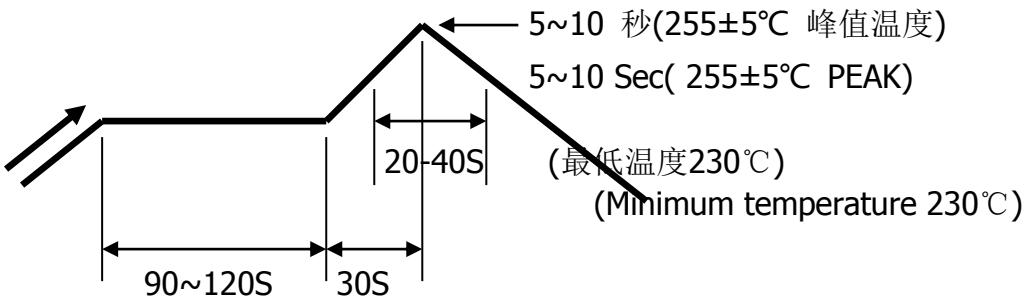
项 目 Item		条 件 Test Condition	规 格 Requirement	
7.9	盐水喷雾 Salt Spray	在温度35±2℃,盐水浓度5±1%下,盐水喷雾24小时. 24 hours exposure to a salt spray from the 5±1% solution at 35±2℃. (Based upon EIA-364-26B)	外观 Appearance	无异状 No Damage
			接触阻抗 Contact Resistance	50 milliohms Max.
7.10	焊锡附着性 Solder-ability	焊接时间: 3±0.5 秒. 焊接温度: 245±5℃. Soldering Time: 3±0.5 second. 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.
7.11	焊锡耐热性 Solder-Resistance	SMT型产品，能够承受焊锡耐热范围. SMT type products, able to withstand the solder heat resistance range. 参考温度曲线图9.0 Refer to Temperature Profile9.0 (Based upon EIA-364-56D)	外观 Appearance	无异状 No Damage

8.0 综合插入力及拔出力 (Insertion/withdrawal force)

<Unit: kgf>

No. of Circuits PIN数	At Initial 首次插入与拔出力 (初始值)		At 30th 30次插入与拔出后	No. of Circuits PIN数	At Initial 首次插入与拔出力 (初始值)		At 30th 30次插入与拔出后
	I.F.(MAX.) 插入力	R.F.(MIN.) 拔出力	R.F.(MIN.) 拔出力		I.F.(MAX.) 插入力	R.F.(MIN.) 拔出力	R.F.(MIN.) 拔出力
2*5	1.20	0.30	0.30	2*13	3.12	0.78	0.78
2*6	1.44	0.36	0.36	2*14	3.36	0.84	0.84
2*7	1.68	0.42	0.42	2*15	3.60	0.90	0.90
2*8	1.92	0.48	0.48	2*16	3.84	0.96	0.96
2*9	2.16	0.54	0.54	2*18	4.32	1.08	1.08
2*10	2.40	0.60	0.60	2*20	4.80	1.20	1.20
2*11	2.64	0.66	0.66	2*25	6.00	1.50	1.50
2*12	2.88	0.72	0.72	2*50	12.00	3.00	3.00

9.0 SMT 红外线回流条件 (SMT INFRARED REFLOW CONDITION)



预热 150~200℃) (Reflow)
(Pre-heat 150~200℃)

温度条件曲线图/ 基板上温度
TEMPERATURE CONDITION GRAPH/ (TEMPERATURE ON BOARD PATTERN SIDE)

注: 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.

10.0 备注 (Remark)

有关规格书内容经变更或改版，如未能及时发布与通知，烦请联系我司业务人员提供产品最新资讯

Any change or revision for the product specification will not beannounced in advance. Please contact our sales representative for the latest information.