



浙江联和电子有限公司
LIANHE ELECTRONICS CO., LTD. ZHEJIANG

产品规格书

PRODUCT SPECIFICATION

产品名称型号

Product Name: _____

产品编码

Part Number: _____ A2543

文件编号

File Number: _____ LHE/QP 013E:2008

地址：浙江省乐清市石帆镇后屿工业区

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产品规格书

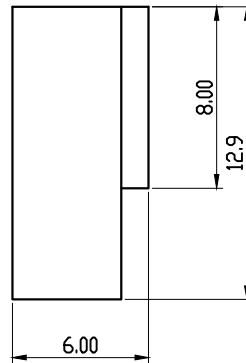
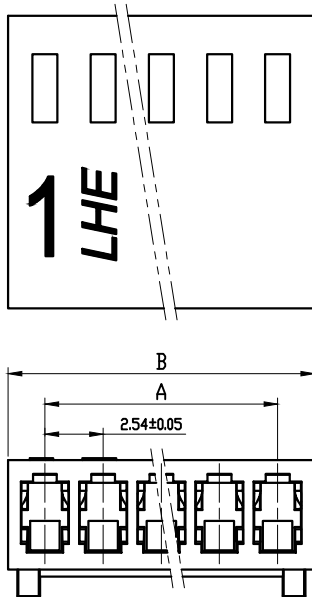
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Version Number: D

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■ 壳体 HOUSING

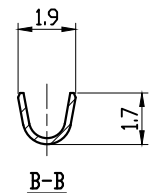
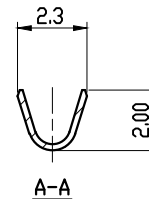
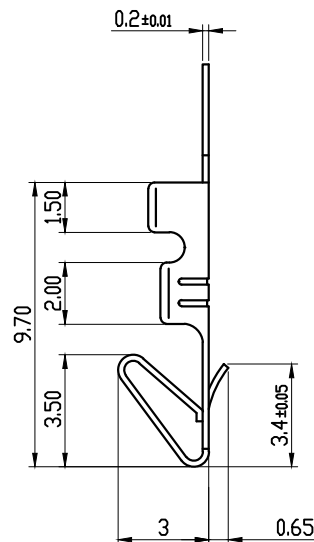
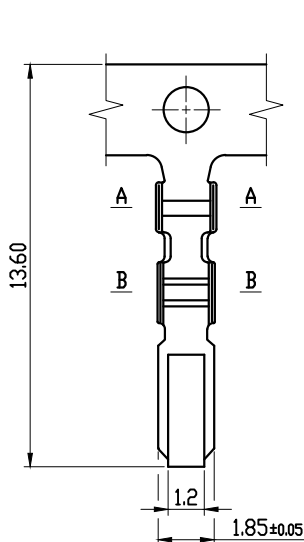
◆ 材料 Material: Nylon 66 UL 94V-0



Poles	Part No.	Dimensions mm	
		A	B
2	A2543-H02	2.54	5.76
3	A2543-H03	5.08	8.30
4	A2543-H04	7.62	10.84
5	A2543-H05	10.16	13.38
6	A2543-H06	12.70	15.92
7	A2543-H07	15.24	18.46
8	A2543-H08	17.78	21.00
9	A2543-H09	20.32	23.54
10	A2543-H10	22.86	26.08
11	A2543-H11	25.40	28.62
12	A2543-H12	27.94	31.16
13	A2543-H13	30.48	33.70
14	A2543-H14	33.02	36.24
15	A2543-H15	35.56	37.78
16	A2543-H16	38.10	41.32
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20	A2543-H20	48.26	51.48

范围	>0~3	>3~18	>18~50	>50~120
公差	±0.12	±0.15	±0.3	±0.5

■ 端子 TERMINAL



范围	>0~3	>3~18	>18~50	>50~120
公差	±0.12	±0.15	±0.3	±0.5

Part No.	Wire Range	Insulation O.D	Material	Finish	Qty/reel
A2543-TP2	AWG #28 to #22	1.2 to 1.9mm	Phosphor bronze	Tin-plated	10,000pcs
A2543-TP8	AWG #28 to #22	1.2 to 1.9mm	Phosphor bronze	Gold.Ni.plated	10,000pcs

产品规格书

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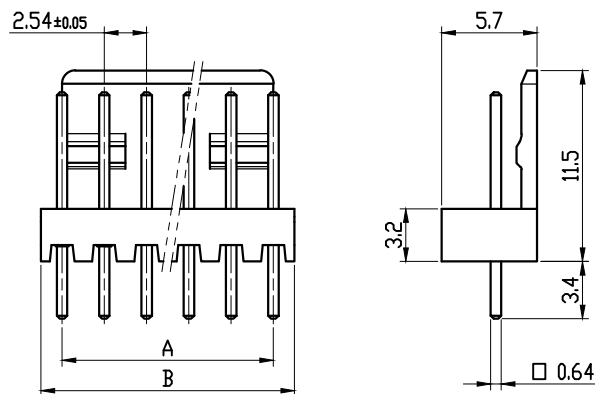
版本号
Version Number: E

产品编码
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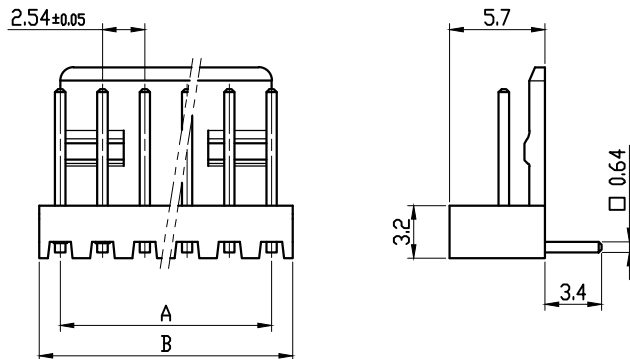
■ 针座 WAFER

◆ 材料 Material: 塑座 Base: Nylon 66 UL94V-0
针 Pin: 黄铜镀锡 Brass Tin-plated

● V-Type:



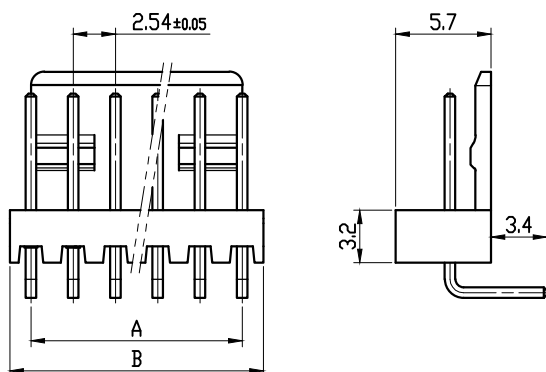
● R-Type:



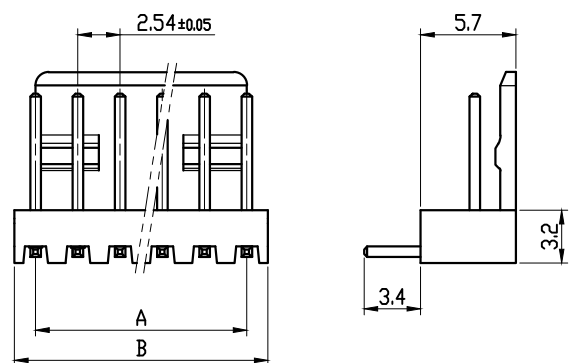
Poles	Part No.		Dimensions mm	
	Straight Angle	Right Angle	A	B
2	A2543-WV02	A2543-WR02	2.54	5.08
3	A2543-WV03	A2543-WR03	5.08	7.62
4	A2543-WV04	A2543-WR04	7.62	10.16
5	A2543-WV05	A2543-WR05	10.16	12.70
6	A2543-WV06	A2543-WR06	12.70	15.24
7	A2543-WV07	A2543-WR07	15.24	17.78
8	A2543-WV08	A2543-WR08	17.78	20.32
9	A2543-WV09	A2543-WR09	20.32	22.86
10	A2543-WV10	A2543-WR10	22.86	25.40
11	A2543-WV11	A2543-WR11	25.40	27.94
12	A2543-WV12	A2543-WR12	27.94	30.48
13	A2543-WV13	A2543-WR13	30.48	33.02
14	A2543-WV14	A2543-WR14	33.02	35.56
15	A2543-WV15	A2543-WR15	35.56	38.10
16	A2543-WV16	A2543-WR16	38.10	40.64
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20	A2543-WV20	A2543-WR20	48.26	50.80

范围	>0~3	>3~18	>18~50	>50~120
公差	± 0.12	± 0.15	± 0.3	± 0.5

● RB-Type:



● RC-Type:



产品规格书

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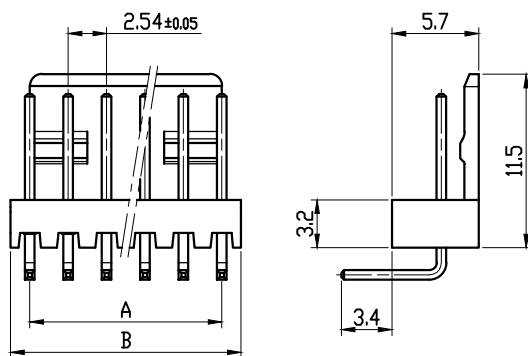
版本号
Version Number: F

产品编码
Part Number: A2543

■ 针座 WAFER

◆ 材料 Material: 塑座 Base: Nylon 66 UL94V-0
针 Pin: 黄铜镀锡 Brass Tin-plated

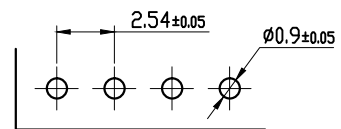
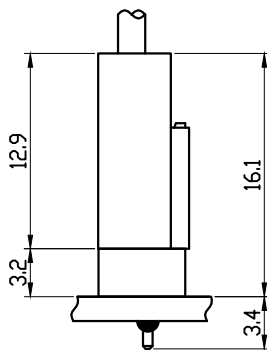
● RD-Type:



Poles	Part No.			Dimensions mm	
	Right Angle	Right Angle	Right Angle	A	B
2	A2543-WRB02	A2543-WRC02	A2543-WRD02	2.54	5.08
3	A2543-WRB03	A2543-WRC03	A2543-WRD03	5.08	7.62
4	A2543-WRB04	A2543-WRC04	A2543-WRD04	7.62	10.16
5	A2543-WRB05	A2543-WRC05	A2543-WRD05	10.16	12.70
6	A2543-WRB06	A2543-WRC06	A2543-WRD06	12.70	15.24
7	A2543-WRB07	A2543-WRC07	A2543-WRD07	15.24	17.78
8	A2543-WRB08	A2543-WRC08	A2543-WRD08	17.78	20.32
9	A2543-WRB09	A2543-WRC09	A2543-WRD09	20.32	22.86
10	A2543-WRB10	A2543-WRC10	A2543-WRD10	22.86	25.40
11	A2543-WRB11	A2543-WRC11	A2543-WRD11	25.40	27.94
12	A2543-WRB12	A2543-WRC12	A2543-WRD12	27.94	30.48
13	A2543-WRB13	A2543-WRC13	A2543-WRD13	30.48	33.02
14	A2543-WRB14	A2543-WRC14	A2543-WRD14	33.02	35.56
15	A2543-WRB15	A2543-WRC15	A2543-WRD15	35.56	38.10
16	A2543-WRB16	A2543-WRC16	A2543-WRD16	38.10	40.64
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20	A2543-WRB20	A2543-WRC20	A2543-WRD20	48.26	50.80

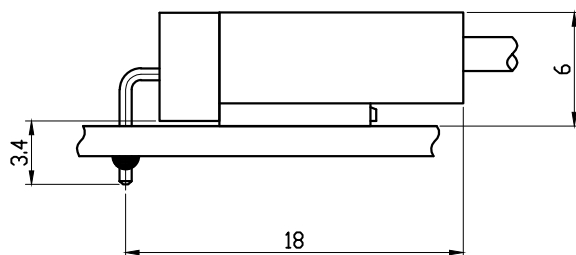
■ 安装尺寸 Mounting Measurement

● 立式 Straight Angle (V-Type)

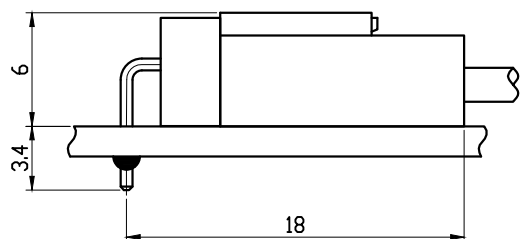


P. C. B LAYOUT

● 卧式 Right Angle (RB-Type)



● 卧式 Right Angle (RD-Type)



范围	>0~3	>3~18	>18~50	>50~120
公差	±0.12	±0.15	±0.3	±0.5

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■ 规格 Specifications

- ◆1、极数 Poles: 2 to 20P
- ◆2、额定电流 Current rating: 4.0A AC, DC
- ◆3、额定电压 Voltage rating: 250V AC, DC
- ◆4、温度范围 Temperature range: -25°C to +85°C
- ◆5、接触电阻 Contact resistance: $\leq 10\text{m}\Omega$
- ◆6、绝缘电阻 Insulation resistance: $\geq 1000\text{m}\Omega$
- ◆7、耐电压 Withstand voltage: 1000V AC/minute
- ◆8、适用线规 Applicable wire: AWG #28 to #22
- ◆9、适用基板厚度 Applicable PC board thickness: 1.6mm

产品性能测试 Performance test			
	项目 Item	测试条件 Test Condition	规格要求 Requirement
1	外观 Appearance	目测 Visual by eye 视力 Light: >1.0 照明 Lamp: 200~300Lx 目测距离 Space: 0.3~0.5m	1. 塑料件表面应无明显疤痕、凹陷、开裂及影响使用的变形。 Plastic part: smooth and flat surface without discolor, broken, crack distortion defects is acceptable. 2. 金属件表面无锈蚀、氧化、无明显的机械损伤等缺陷。 Metal part: tight and even surface without rust, oxide, fog and obvious physical damage defects is acceptable. 3. 导线表面清洁、无破损等缺陷, 印字及标志清晰。 Wire: clearing surface without discolor, broken defects, indistinct words and mark is acceptable.
2	接触电阻 Contact Resistance	插合连接器, 用小功率电路进行测试。 Mate connectors, measure by dry circuit.	10mΩ MAX
3	绝缘电阻 Insulation Resistance	在相邻接触件之间或地线之间, 用500V DC电压进行测试。 Apply 500V DC between adjacent terminal or ground.	1000mΩ MIN
4	耐电压 Dielectric Strength	相邻接触件之间或地线之间施加50Hz 1000V AC(有效值), 漏电流1mA的电压作用, 时间1min。 Mate connectors, apply 1000V AC for 1 minute between adjacent terminal or ground.	无击穿和飞弧现象 No Breakdown

产品规格书

PRODUCT SPECIFICATION

版本号
Version Number: D

产品编码
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产品性能测试 Performance test				
	项目 Item	测试条件 Test Condition	规格要求 Requirement	
5	压着部位抗张强度 Crimping Pull Out Force	在试验装置夹头中固定测试样品, 在连接的轴线方向施加张力;速度不大于25mm/min。 Fix the crimped terminal, apply axial pull out force on the wire at the speed rate of not more 25mm/min.	AWG. 22#	40N MIN
			AWG. 24#	30N MIN
			AWG. 26#	20N MIN
			AWG. 28#	15N MIN
6	壳体/端子固定力 Terminal/Housing Retention Force	固定连接器或测力计, 在连接器轴线方向施加规定的拉力;速度不大于25mm/min。 Apply axial pull out force at the speed rate of not more 25mm/min on the pin assembled in the housing.	15N MIN	
7	针的固定力 Pin Retention Force	固定连接器或测力计, 在连接器轴线方向对针施加规定的推力;速度不大于25mm/min。 Apply axial push out force at the speed rate of not more 25mm/minute on the terminal assembled in the base.	15N MIN	
8	可焊性 Solderability	把测试样品需要焊接的部位浸入焊锡炉中(锡炉温度235℃±5℃)2~3秒钟。 Soldering time: 2~3 second Solder Temperature: 235℃±5℃	上锡率≥90% 90% of immersed area must show no voids, pin holes	
9	耐焊接热 Resistance to Soldering Heat	把测试样品需要焊接的部位浸入焊锡炉中(锡炉温度260℃±5℃); 4~6秒钟后在正常的条件下恢复1小时。 Soldering time: 4~6 second Solder Temperature: 260℃±5℃	外观 Appearance	无损伤 No Damage
10	耐高温 Heat Resistance	把试件放入高温试验箱中, 以0.7~1℃/min的温度变化速度, 将温度调到85℃±2℃待平衡后保持4小时, 然后以同样的速度降到室温, 恢复2h后检查。 85℃±2℃, 4 hours	外观 Appearance	无损伤 No Damage
11	耐低温 Cold Resistance	把试件放入低温试验箱中, 以0.7~1℃/min的温度变化速度, 将温度调到-25℃±2℃待平衡后保持4小时, 然后以同样的速度升到室温, 恢复2h后检查。 -25℃±2℃, 4 hours	外观 Appearance	无损伤 No Damage
12	温度上升 Temperature Rise	插入连接器, 通以最大允许电流。 Carrying rated current load.	温度最大上升 Temperature Rise	30℃ MAX

产品规格书

PRODUCT SPECIFICATION

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产品性能测试 Performance test				
	项目 Item	测试条件 Test Condition	规格要求 Requirement	
13	恒定湿热 Humidity	温度: $40 \pm 2^{\circ}\text{C}$ 相对湿度: 90%~95% 搁置时间: 96小时, 取出恢复2h后检查 Temperature: $40 \pm 2^{\circ}\text{C}$ Relative Humidity: 90%~95% Duration: 96 hours	外观 Appearance	无损伤 No Damage
			耐电压 Dielectric Strength	满足第4项 Must meet 4
			绝缘电阻 Insulation Resistance	1000m Ω MIN
14	温度循环 Temperature cycle	把测试样品放入高低温试验箱中, 按下列步骤调试温度: a) 在 $-25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 的恒温条件下放置1小时; b) 在常温常湿条件下放置1小时; c) 在 $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 的恒温条件下放置1小时; d) 在常温常湿条件下放置1小时。 从a)到b)为一个循环周期, 共进行5个循环。 恢复2h后检查。 5 cycles of a) $-25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 1hour b) $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 1hour	外观 Appearance	无损伤 No Damage
			接触电阻 Contact Resistance	10m Ω MAX
15	振动 Vibration	插入连接器, 串联在一直流电源上, 电流1mA; 并模拟正常工作状态, 振频为10~55Hz、振幅0.35mm; 55~500Hz、加速度50m/s ² , 每一轴线扫频循环次数10次、2小时。 Frequency: 10~55Hz Amplitude: $\pm 0.35\text{mm}$ Frequency: 55~500Hz Acceleration: 50m/s ² Duration: 2 hours in each X,Y,Z axes	外观 Appearance	无损伤 No Damage
			接触电阻 Contact Resistance	10m Ω MAX
			瞬断(当电阻 $>7\Omega$) Discontinuity (when $R>7\Omega$)	1 μs MAX
16	机械寿命 Repeated insertion/withdrawal	以每分钟插拔10次的速率, 插拔50次。 When mated up to 50 cycles repeatedly by the rate of 10 cycles per minute.	接触电阻 Contact Resistance	10m Ω MAX
17	盐雾 Salt Spray	把测试样品从试验箱顶悬挂下来, 采用浓度为 $5\% \pm 1$ (质量百分比) 的氯化钠溶液, 连续雾化16小时, 试验后用流动的蒸馏水轻轻洗去表面沉积物。在常温常湿条件下恢复1~2小时。 16 hour exposure to a saltspray from the $5\% \pm 1$ solution.	外观无损伤(五金件应无露出底金属的严重锈蚀; 使用预镀的型材, 其落料面允许有不影响其性能的轻微腐蚀。) Exterior No Damage	

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PRODUCT SPECIFICATION

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产品性能测试 Performance test							
	项目 Item	测试条件 Test Condition	规格要求 Requirement				
18	插入力与拔出力 Insertion and Withdrawal Force	相配的连接器以1mm/s～5mm/s的速度沿接插器轴线方向插入和拔出。 Insertion and withdraw connectors at the speed rate of 1mm/s～5mm/s.	Poles	插入力(最大值) Insertion (MAX)		拔出力(最小值) Withdrawal (MIN)	
				初次 1st	第六次 6st	初次 1st	第六次 6st
			2				
			3				
			4				
			5				
			6				
			7				
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