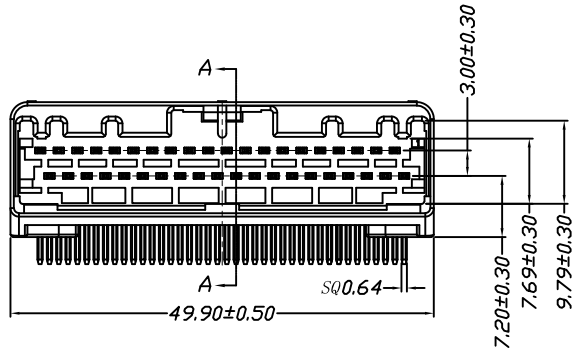
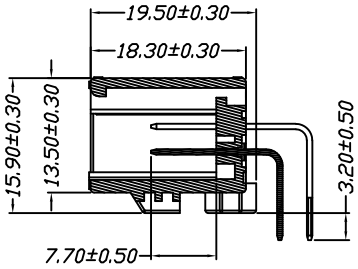
环保物料

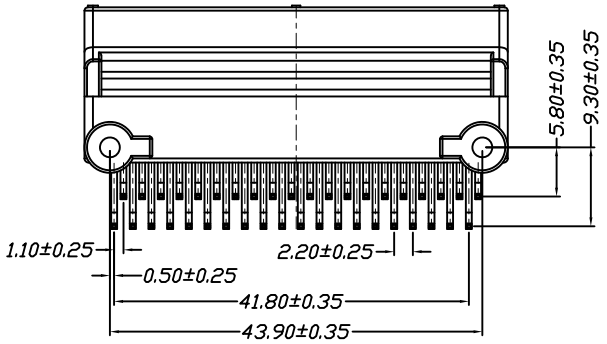


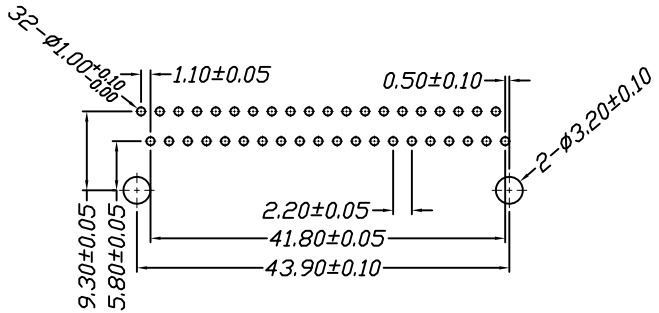


SECTION A-A

Specification技术规范:

Voltage Rating额定电压: 250V AC/DC
Current Rating额定电流: 3A AC/DC
Withand Voltage耐电压: 1000V AC/Minute
Contact Resistance接触电阻: 30mΩ Max
Insulation Resistance绝缘电阻: 1000MΩ Min/1000V DC
Temperature Range工作温度: −40℃~+105℃
Plating电镀:
Light Tin plating over Nickel 底面镀镍，表面镀亮锡
Ni: 50−80U"
Tin: 100U" Min





Recommended PCB patterm

Material	Color	PIN Material
PA66+30%GF,UL94V-0	GRAY	Brass/Sn&Ni-plated

				GENERAL TOLERANCES		SCALE: 1:1	NAME	DATE	康导新能源	PART. NO: 42202W90-2*20PG-A1-SN
				LINEAR	ANGLES					
				0.0±0.50	X° REF±6°	APPROVED	黎腾	2017.06.16		
A0	新图面发行	2017.06.16	UNIT: MM	0.00±0.30	X° ±3°	DESIGNER	肖坤权	2017.06.16	TITLE:	DWG. NO:
REV.	REVISION RECORD	DATE	SIZE: A4	0.000±0.20	X° X'±2°	DRAWN	黄薇	2017.06.16	PH2.2MM 2X20P PC3.20MM 90度 镀亮锡 PA66新料 灰色	REV: A0 SHEET: 1/

网址: www.dgconne.com 电话: 0769-85337633
邮箱: 2850176966@qq.com 传真: 0769-85362827

东莞市康导新能源科技有限公司 DongGuan KD New Energy Technology Co.,LTD	日期Date	2025/1/3
	产品型号 Part Number	42202W90-2X20PG-A1-SN

产品规格书
Product Specification

1.1 产品规格

产品名称Product Name	规格Specification
针座WAFER	PH2.2MM 2X20P PC3.20MM 90度 镀亮锡 PA66+30%GF新料 灰色

1.2 材质与表面处理Material&surface treatment

零件名称Part Name	材质Material	表面处理Surface processing
端子Contact	黄铜BRASS	镀亮锡80-120U″
塑胶Plastic	PA66+30%GF UL94V-0 GRAY	------

2.0 电性特性Electrical characteristics

额定電流 Rating Current	3AMP AC/DC
额定電压 Rating Voltage	250V AC/DC
耐电压 Withstand Voltage	1000V AC
接触电阻 Contact Resistance	30mΩ Max.
绝缘电阻 Insulation Resistance	1000MΩ Min./(1000V DC)
工作温度 Working Temperature	-40° C～+105° C
存储温度 Storage temperature	-10° C～+40° C

2.1 物理特性Physical characteristics

熔点Melting point 290℃

Heat deflection temperature under load

热变形温度 ---18.6 kg/cm² 240℃

3.0 默认测试条件Default test conditions

在具体试验方法中如无其他规定，试验样品应先在下述条件下放置24H后，然后再进行试验，样品的预处理条件和默认的试验条件如下：

Pa All test samples shall be preconditioned at (18～28)℃ and 45%～75% relative humidity for 24h before the start of any test.

All test shall be carried out at following basic condition:

环境温度：18～28℃，空气相对湿度：45%～75% 大气压力：86kPa～106kPa

Ambient temperture: (18～28)℃ Relative humidity:45%～75% Atmospheric pressure:86kPa～106kPa

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4.产品性能Performance

项目Item	测试设备 Equipment	引用标准 Reference	测试条件和方法Condition & Metrhod	规格要求Requirement
4.1 外观 Appearance	照相机、摄相机、放大镜等放 大设备(如需要) Camera,Video recorder, Magnification apparatus(as required)	相应图纸 Drawing	目视检查视力Visual examination vision：>1.0 照明Illumination：(200-300)lx 目测距离Viewing distance：(0.3-0.5)m	1塑胶件表面应无明显疤痕、凹陷、开裂及影响使用的变形 The surface of the plastic parts should be free of obvious scars, depressions, cracks and deformations affecting the use. 2.金属件表面无锈蚀、氧化、无明显的机械损伤等缺陷 There is no corrosion, oxidation, mechanical damage and other defects on the surface of metal parts. 3.标志、其他零部件外观符合相应规范The appearance of the logo and other parts shall conform to the corresponding specifications.
4.2 结构尺寸 Dimension	卡尺、投影仪 Caliper, Projector	相应图纸 Drawing	用符合祥细规范(或设计图样)精度要求的卡尺、投影仪进行测量 Use caliper or rejector to mesasure the dimension.	符合图纸要求 The dimension accord with the part drawing.
4.3 接触阻抗 Contact Resistance	直流低电阻测试仪DC low resistance tester	QC/T 1067.1 -2017车用电线束连接器（第4.7项）	在受测连接器之公母端子对上施加20mV DC Max. 100mA开路电流条件下测试 Test with an open circuit current of 20mV DC Max. 100mA applied to the male and female terminal pairs of the connectors under test	初始接触电阻The initial contact resistance:30mΩ Max.
4.4 绝缘阻抗 Insulation Resistance	程控耐压绝缘测试仪Program controlled voltage insulation tester	QC/T1067.1-2017车用电线束连接器（第4.27项）	将试验样品的所有接端交错连接成两组，再施加规定的试验电压，测量绝缘电阻。测量电压：1000V DC。 All the terminals of the test sample are interleaved into two groups, and then the prescribed test voltage is applied to measure the insulation resistance. Measurement voltage: 1000V DC	插接件间的绝缘电阻应至少为1000MΩ The insulation resistance between connectors should be at least 1000MΩ min.

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4.5 耐电压 Withstand Voltage	耐压测试仪 Withstand voltage tester	QC/T 1067.1-2017车用电线束连接器（第4.28项）	先将试验样品的所有接端交错连接成两组，尽量使每组内不存在互相邻近的插接件，再施加规定的试验电压。相邻插接件之间或地线之间施加1000V(50Hz,有效值:1分钟) Apply an AC voltage of 1000V(50Hz) for 1 minute across all contacts connected together and a metal foil surrounding the housing.	试验电压的作用下无闪络、飞弧或击穿 During this test, neither dielectric breakdown nor flash-over shall occur.
4.6 插入力 Insertion Force	使用配套标准插头 Use standard plug	QC/T 1067.1-2017车用电线束接插器（第4.12项）	固定插座,以每分钟50±3mm的速度插入插座。Fixed plug,by each minute 50±3mm speed insertion plug.	无锁紧装置Without locking device 插入力Insertion Force：≤10N/PIN
4.7 拔出力 Withdrawal Force	使用配套标准插头 Use standard plug	QC/T 1067.1-2017车用电线束接插器（第4.12项）	固定插座，以每分钟50±3mm的速度拔出插座。Fixed plug,by each minute 50±3mm speed out the plug.	无锁紧装置Without locking device 拔出力Withdrawal Force：≥1N/PIN
4.8 机械寿命 Durability (Repeaterd Mating/ Unmating)	配合的产品 Product of Mate	QC/T 1067.1-2017车用电线束接插器（第4.3项）	同配合产品进行50次插拔 Mate and unmate connector for 50 cycle.	完成插拔测试后接触电阻不大于30mΩ Contact Resistance 30mΩ max. after testing.
4.9 端子保持力 Retention Force	测力计Force tester	相应图纸 Drawing	以每分鐘25～100mm的速度拔出端子，测试端子在塑胶件中的保持力. Pull out the terminal at a rate of 25 mm to 100mm per minute, and test the holding power of the terminal in the plastic part.	单根端子的最小保持力为2.0Kg Retention Force for a terminal 2.0Kg Min.
4.10 锁扣强度(若有)Locking Strength (if contain)	测力计Force tester	QC/T 1067. 1-2001车用电线束接插器（第4.12项）	在已适配的连接器之塑胶上加一轴向力测定锁扣的强度Apply and axial pull-out load to one of the mated housing, measure the locking strength.	锁扣强度必须大于80N Locking strength greater than 80N.
4.11 阻燃性 Combustibility	酒精灯 Spirit Lamp		产品置于火焰10秒 Place the product in the flame of an alcohol lamp for 10 seconds	离开火焰后,持续燃烧时间小于10秒,无滴落体或滴落体不燃烧 After leaving the flame, the continuous burning time is less than 10 seconds, no dripping body or dripping body does not burn.

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4.12 振动 Vibration	振动试验机 Vibration equipment	QC/T 1067. 1-2001车用电线束接插器（第4.17项）	产品应能经受X、Y、Z三个方向的扫频振动试验。振动频率：10 55 10HZ,振幅1.5mm,扫描时间1分钟，在X、Y、Z三个方向上分别持续振动2小时。 Carry out the vibration with connectors. Vibration frequency: 10 55 10HZ Amplitude:1.5mm Vibration direction: X、Y、Z Duaration: 2 hours each	1.试验中电路保持连续性 The circuit remains continuous during the test. 2.接触电阻Contact resistance: 30mΩ Max. 3.测试过程中端子连接电阻连续大于7Ω的时间应不超过1μs During the test, the time less than 1μs when R>7Ω
4.13 热冲击 Thermal shock	冷热冲击试验机 Thermal shock equipment	QC/T 1067. 1-2001车用电线束接插器（第4.29项）	温度范围-40°C～+105°C；每25分鐘轉換一次，转换时间不超过30秒，共循环5次 Temperature range from -40°C to +105°C,Start from -40°C,after 25 minute change to +105°C, change time is not more than 30 seconds. Total 5 cycle.	产品无损坏No damage. 接触电阻Contact tesistance: 30mΩ max.
4.14 温度/湿度循环 Temperature /humidity cycling	恒温恒湿机 Humidity heat Constant equipment	QC/T 1067. 1-2001车用电线束接插器（第4.30项）	耐溫度湿度变化测试,在不工作的状态下进行The temperature and humidity resistance test is carried out in the non-working state: 1.(23±5)℃,humidity 45%～75%,4H 2.(55±2)℃,humidity 95%～99%,10H 3.(-40±2)℃,2H 4.(105±2)℃,2H Total 10 cycle	外观无损伤Appearance no damage. 接触电阻Contact tesistance: 30mΩ max. 绝缘电阻Insulation resistance: 1000MΩ min.
4.15 耐高温 High temperature test	恒温恒湿机 Humidity heat Constant equipment	QC/T 417.1-2001 车用电线束接插器(第4.14项)	在温度105±2°C环境中放置96小時,再放在正常环境中120分钟后进行测试 At 105±2°C for 96 hours, test afterf keeping in normal condition for 120 minute.	外观无损伤Appearance no damage. 接触电阻Contact tesistance: 30mΩ max. 绝缘电阻Insulation resistance: 1000MΩ min.
4.16 耐低温 Cold resistance	恒温恒湿机 Humidity heat Constant equipment	GB/T 2423.2-2008	在温度-40±3°C环境中放置96小時,再放在正常环境中30分钟后进行测试 At -40±3°C for 96 hours, test afterf keeping in normal condition for 30 minute.	外观无损伤Appearance no damage. 接触电阻Contact tesistance: 30mΩ max. 绝缘电阻Insulation resistance: 1000MΩ min.

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4.17 温升 Temperature rise	多路温度测试仪Multiplex temperature tester	GB/T 2423.2-2008	将试验样品(两对配合)插合，通以规定的电流，当热平衡后，用多路温度测试仪测量接触处的温升，记录所显示的数值,接点温升为记录的数值减去环境温度。Mate connectors and carry rated current load. After heat balance, use the multiplex temperature tester to measure the temperature.	连接器的各个插接器在插合时，通以规定的电流后，其温升应不超过55°C。 The temperature rise of each connectorshall not exceed 55°C when the specified current is applied
4.18 盐雾 Salt Spray	盐雾试验机 Salt Spray Chamber	GB/T 2423.17-2008 电工电子产品环境试验第2部分：试验方法试验Ka：盐雾	采用浓度为(5±0.1)%的氯化纳溶液,PH值在6.5～7.2之间,溫度(35±2)°C,连续雾化8H,试验后用流动的蒸镏水水轻轻洗去表面沉积物,在常溫条件下恢复(1～2)h后检查试验样品 The salt solution concentration shall be 5%.The pH shall be maintained between 6.5 and 7.2. The test temperature maintained at(35±2)°C. The drueation of the test shall be 8H. Salt deposits shall be removed by a gentle wash or a dipin running water and a light brushing. The sample shall resume at room temperatue for 1～2h	试验后,金属件应无漏出基底金属的严重锈蚀(使用预镀好的型材,其落料面允许有不影响其性能的轻微腐蚀） After the test, the metal parts shall be free from severe corrosion leaking out of the base metal (using pre-plated profiles, the blanking surface of which is allowed to have slight corrosion without affecting its performance).
4.19 耐焊接热 Resistance to soldering heat	焊锡炉 Solder	QC/T 417.1-2001 车用电线束接插器	将试验样品需要焊接的部位浸入焊锡炉中，待其冷却至室温后观察，锡炉温度265±5℃，时间5±1秒。 Dip the test sample in the solder pot where it needs to be welded. It should be checked and measured after connector become room temperature. Solder temperature:265±5℃ Immersion duration:5±1s	外观无损伤 Appearance no damage.
4.20 粘锡性 Solderability	焊锡炉 Solder	QC/T 417.1-2001 车用电线束接插器	产品置入助焊剂中5～10秒,再浸入温度为245±5℃锡炉中3±0.5s,在10倍放大镜下观测 The product was placed in flux for 5 ~ 10 seconds, and then immersed in a tin furnace at a temperature of 245±5℃ for 3±0.5s, and observed under a 10x magnification glass	粘錫覆盖率必须超过95% Solderable area shall have solder Coverage of 95% minimum.