

# 产品规格书

## SPECIFICATION

客户:  
CUSTOMER:

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供应商产品名称: 遥控器  
SUPPLIER PRODUCT NAME: REMOCON

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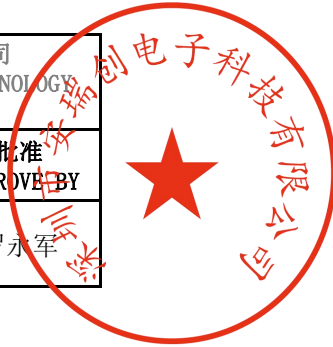
安瑞创物料编码: AN2301B-OKG-001  
SUPPLIER MATERIAL CODE: AN2301B-OKG-001

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送样日期: 2022. 06. 15  
RECEIVED DATE:

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四. 产品信息及要求/ PRODUCT INFORMATION AND REQUIREMENTS

编号/NUMBER	项目/ITEM	内容/CONTENT	判定标准/JUDGEMENT STANDARD	测试结果/test result
1. 结构外观 ENGINEERING DRAWING	尺寸, 净重, 毛重(带包装袋) Size, net weight, gross weight(with package)	SIZE:175*43*23.1 net weight: 55g gross weight:68.5g	按包装要求According to packaging requirements	符合
	遥控器包装及标签 Remote control package and label	按包装要求According to packaging requirements	按包装要求According to packaging requirements	符合
	材质 Material	符合ROHS/ROHS&REACH/ ROHS&REACH&无卤 Comply with ROHS/ROHS& REACH /ROHS&REACH&HF	符合 ROHS/ROHS&REACH	符合
	按键材质(金属锅仔片/塑胶锅仔片/碳粒) Button material (metal pan pieces/plastic pan pieces/carbon particles)	金属锅仔片metal pan pieces	130g±30g	符合
	外观 Appearance	下列项目均目测确认: The following items were visually confirmed: 1. 划伤、油污、割裂、变形 1. Scratch, contamination, rupture, deformation 2. 应刷图形及文字 2. Printed graphics and text 3. 铭版粘接 3. Inscription plate bonding 4. 壳体配合 4. Shell fit 5. 表面 5. surface	1. 无上述各现象 1. None of the above phenomena 2. 清晰、均匀、整齐, 色差不允许超过两个色号 2. Clear, uniform, neat, Chromatic aberration isn't allowed more than two Pantone Num 3. 无浮起、鼓包、划痕 3. No float, drum bag, scratch 4. 无翘起、变形、裂缝 4. Without tilting, deformation and crack 5. 材质均匀、颜色一致 5. Materialis uniform, the color is consistent	符合

2. 机械性能 MECHANICAL BEHAVIOR	按键工作的负荷力 Buttons force	0.8N~3N, 各相同形状按键负荷力的离散性不大于0.4N The discretization of force of the same shape buttons is not greater than 0.4N	以按键中心为基准点	符合
	按键高度 Buttons height	按键未按下的高度 $H < 3\text{mm}$ /height h button unpressed $H < 3\text{mm}$ 按键按下起作用时的高度 $H_1$ 不能低于上盖面 /height $H_1$ shall not be lower than the upper cover when the button is pressed and the RC is working	0.6mm	符合
	按键强度 Buttons strength	在按键平面中央垂直施加30N的负荷力3分钟 Apply 30N vertically in the center of the buttons plane for 3 minutes	按键无损坏, 各功能应正常 Buttons are not damaged, all functions should be normal	符合
	按键的负荷寿命 Life of Buttons	以3-5次/秒的按压频率按键 $\geq 20$ 万次, 不到位次数小于或等于0.5% Press the button with the frequency of 3-5 times /second more than 200,000 times, and the number of times not in position is less than or equal to 0.5%	按键无损坏, 各功能应正常 Buttons are not damaged, all functions should be normal	符合
	按键的复位 Reset button	分别在按键平面1/4位置的左端和右端及按键的左、右、前、后侧面施加10N的力, 按压三分钟 Apply 10N force on the left end and right end of 1/4 position of the button plane and the left, right, front and back side of the button respectively, press for 3 minutes	按键无损坏, 各功能应正常 Buttons are not damaged, all functions should be normal	符合
	遥控器耐压强度 Remote control pressure resistance	在遥控器装电池的情况下, 对遥控器的正面和底面分别施加100N的垂直力 Apply 100N to the front and bottom of the remote control respectively when the remote control is charged with battery	遥控器无损坏且功能应正常 Remote control is not damaged and all functions should be normal	符合
	电源盖板插拔寿命 Power cover plug life	以2-3次/分钟插拔频率插拔电源盖板不少于100次 Plug and cover the power cover at a frequency of 2-3 times/min not less than 100 times	无异常 Without exception	符合

3. 使用规格 USE GUAGE	工作环境 Work environment	-10℃-50℃	无异常 Without exception	符合
	贮存温度 storage temperature	-20℃-60℃	无异常 Without exception	符合
	电池规格 Battery Specification	7号 (AAA) , DC 3V AAA size/DC 3.0V		符合
4. 电气参数 ELETRICAL PARAMETERS	静态电流 Static Current	电源电压 DC3V Power supply voltage DC3V	<5uA	符合
	工作电流 Working current	电源电压 DC3V Power supply voltage DC3V	<50mA	符合
	工作电压 Working voltage	DC 3V (-20% +10%)	2.2V-3.3V	符合
	工作功率 Working power	正常工作 Normal working	≤100mW	符合
	载波频率 Carrier frequency	2400-2483MHz	38KHZ±1.5%	符合
	发射距离 Emission distance 电源电压DC3V, 解码仪 Power supply voltage DC3V, decoder instrument			符合
	无线匹配性测试 Wireless matching test	在无干扰状态下与整机100次匹配 Matching with the machine 100times without in the state of no interference source	不出现匹配失败, 且每次匹配成功后功能应正常 Matching failure does not allowed to occur, and the function should be normal after each test	符合
	无线连接稳定性测试 Stability of wireless connection test	与机器匹配后连接12小时 Connect with the machine for 12 hours after matching	中间断开次数不得超过10次, 每次时长不得超过6S The number of intermediate disconnection shall not exceed 10 times, and not longer than 6S per time.	符合
	红外光峰值辐照度 Peak irradiation of infrared light	额定工作电压 rated operational voltage	轴上≥40 μW/cm <sup>2</sup> 圆锥角≥30°, ≥20 μW/cm <sup>2</sup> Infrared: On the Stalk≥40 μW/cm <sup>2</sup> cone angle≥30°, ≥20 μW/cm <sup>2</sup>	符合
	欠压状态: 红外光峰值辐照度 Undervoltage state: Peak irradiation of infrared light	额定工作电压的75% 75% of rated operational voltage	轴上≥20 μW/cm <sup>2</sup> 圆锥角≥30°, ≥10 μW/cm <sup>2</sup> Infrared: On the Stalk≥20 μW/cm <sup>2</sup> cone angle≥30°, ≥10 μW/cm <sup>2</sup>	符合

5. 耐候性能 WEATHERING PERFORMANCE	高温贮存 High temperature storage	在温度55℃下搁置48小时，恢复2小时后测试 Put the RC under the temperature of 55 °C for 48 hours, then test the RC after 2 hours' recovery	无异常 Without exception	符合
	恒定湿热贮存 Constant heat and humidity storage	在温度40℃下，相对湿度95%的条件下搁置48小时，恢复4小时后测试 Put the RC under temperature 40 °C, relative humidity 95% for 48 hours, then test the RC after 4 hours' recovery	无异常 Without exception	符合
	低温贮存 Low temperature storage	在温度-25℃下搁置48小时，恢复2小时后测试 Put the RC under the temperature of -25 °C for 48 hours, then test the RC after 2 hours' recovery	无异常 Without exception	符合
	温度变化贮存 Varying temperature storage	遥控器承受如下的温度变化实验5个循环后，即：室温→-10℃（3小时）→40℃（3小时）→室温，恢复2小时后测试 RC experiment under the following temperature changes after five cycles : room temperature - > - 10 °C (3 hours) - > 40 °C (3 hours) - > at room temperature, the recovery test after 2 hours	无异常 Without exception	符合
	振动实验 The vibration test	a. 水平方向振动：频率10-20-10Hz 位移0.75mm, 轴线扫频5个周期 A. Frequency of 10 - 20 - 10HZ, displacement is 0.75mm, axis frequency sweep 5 cycle	无异常 Without exception	符合
		b. 频率30-55-30Hz 位移0.75mm, 轴线扫频5个周期 B. Frequency of 30 - 55 - 30HZ, displacement is 0.15mm, axis frequency sweep 5 cycle	无异常 Without exception	符合

<b>5. 耐候性能 WEATHERING PERFORMANCE</b>	跌落试验 Drop test	在遥控器装有电池的条件下，不带包装，从80cm 高度自由落在不小于3cm厚木板上，遥控器的跌落面应与冲击面平行，每个面(共6个面)各跌落三次 Under the condition of remote control with batteries, without packing, free fall on a height of 80 cm on the plank thicker than 3cm, the fall of the remote control surface should be parallel to the strike face, each side ( total 6 sides) fell three times	结构应无断裂，功能应正常 The structure should be faultless, all functions should be normal	符合
	耐温水 Heat water resistance	能耐60℃的温水，60℃的温水滴在遥控器表面三个不同的部位上包括字符图形符号部位，用软布擦干 It can withstand 60 degrees of warm water, 60 degrees of warm water dripping on the surface of the remote control three different parts including characters and symbols , then wipe with soft cloth.	遥控器的表面色调不应起变化，字符标志不应被擦掉 The surface color of the remote control should not change, and character marks should not be erased.	符合
	字符、标志、涂饰部分的附着力 The adhesion of characters, signs, and finishing parts	用粘附力为2 - 3.5N/cm的透明胶带粘遥控器的字符、标志和涂饰部分 Use the adhesive tape with 2 to 3.5N/cm to stick the character, logo and finishing part of the remote controller.	无脱落现象 No shedding phenomenon	符合
	耐溶剂性 Solvent resistance	1.用浸有20%的食盐水、无水乙醇分别擦拭遥控器表面三个不同部位上包括字符图形符号部位30次 Wipe three different parts on the surface of the remote control respectively with 20% salt water and anhydrous ethanol, including the symbol parts of characters and figures 30 times 2.将食用油用滴管滴在遥控器表面三个不同部位包括字符图形符号部位，1h 后用软布擦干 Drop the cooking oil into three different parts on the surface of the remote control, including the characters and symbols. Dry with a soft cloth after 1h	表面硬度和外观无异常，字符图形符号清晰 There is no abnormal surface hardness and appearance, and the characters and symbols is clear	符合

FCCStatement:

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and

can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off

and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

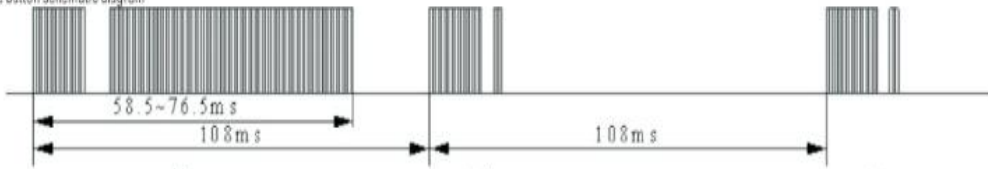


五. 外观尺寸图/DIMENSIONS FIG

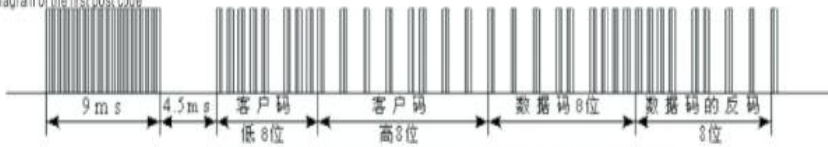


## 六. 发码格式与波形 / HAIR CODE AND WAVEFORM FORMAT

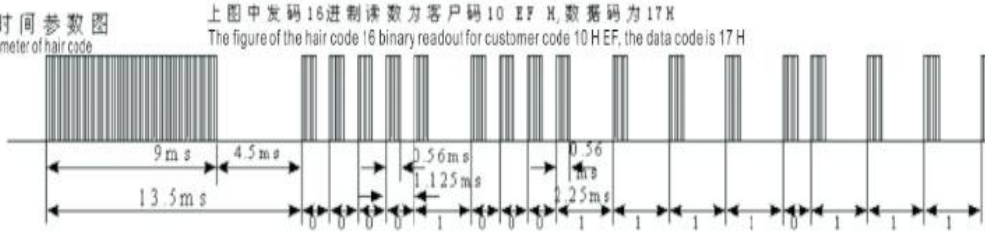
长按键发码示意图  
Long press the button schematic diagram



第一帧发码示意图  
Schematic diagram of the first post code



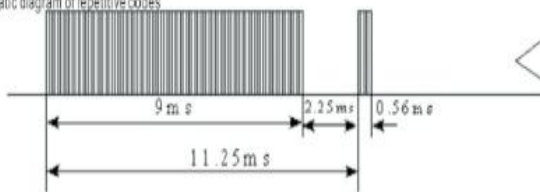
发码时间参数图  
Time parameter of hair code



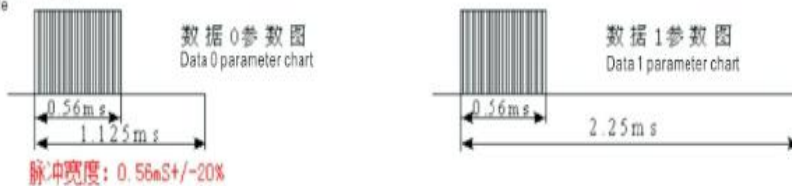
上图中发码16进制读数为客户码10 EF H,数据码为17H  
The figure of the hair code 16 binary readout for customer code 10 H EF, the data code is 17 H

上图中16位客户码为: C0/C1/C2/C3/C4/C5/C6/C7/C8/C9/C10/C11/C12/C13/C14/C15=0000100011110111  
Figure 16 customer code: 16进制从高位往低位读数为10 EFH  
16 hex from the high to low reading of 10 EFH

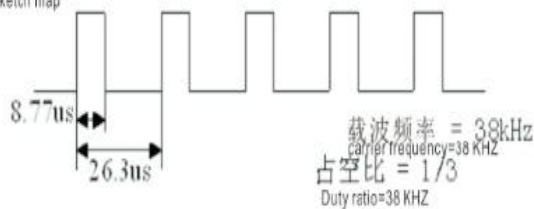
重复码示意图  
Schematic diagram of repetitive codes



发码数据参数示意图  
Sketch map of hair code

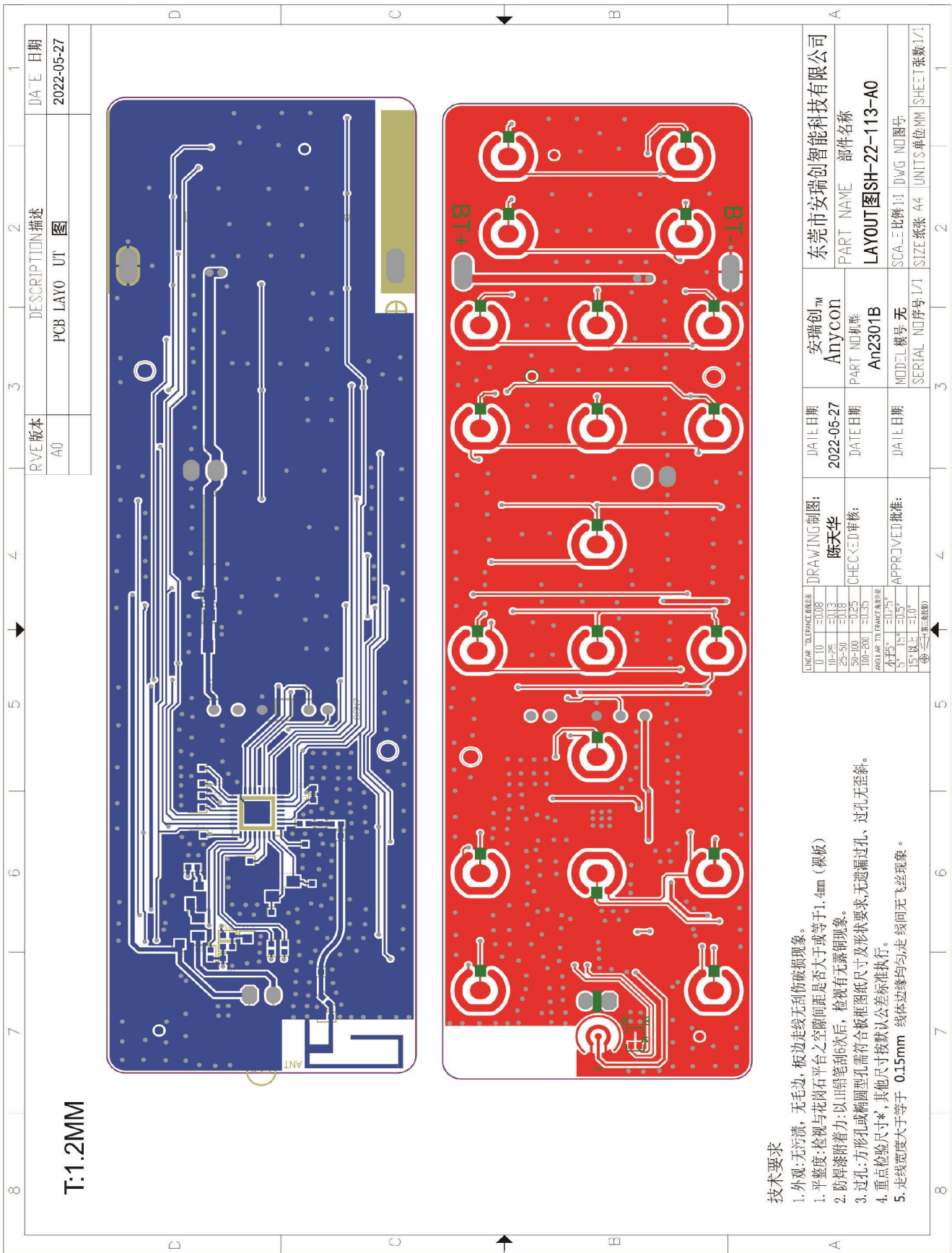


载波示意图  
Carrier sketch map





# 八. PCB图 / PCB CHART





九. 图纸与码值表/DRAWING AND CODE VALUES TABLE

User Guide		REV	EDSCRIPTION	DATE
		A0		2022-06-08
Applicable Standards : <input checked="" type="checkbox"/> Anycon <input type="checkbox"/> Customer User Guide		IR protocol:NEC client code: 0x4040		
		bluetooth code usage page: 0x0C		
Item	Standard			
Operating Voltage	2.1-3.3V			
Quiescent Current	< 10uA			
Dynamic current	≦ 50mA			
Carrier test	38.0±0.7KHz			
launch distance	≥10M At 0°			
up and down	±15° 8M			
	Left and right	±30° 8M		
Frequency test	2.440GHz ±75KHz	Press and hold [Vol-] and then power on to enter the constant frequency test mode, release [Vol-] to exit.		
Power test	≥-35dBm			
key code test	Press and hold [BA ]+[Vol-CK ] for 3 seconds, the red LED light flashes, and the Bluetooth broadcast name is: RC-31, click to connect You can test the connection with the remote control. The red light is always on and then goes out to indicate that the connection is successful, and the bluetooth button does not light up. Test the Bluetooth key value first and then test the voice function. When testing the voice, press the voice button to start speaking, the voice is clear and no Caton is passed. (press the voice button, the LED light will be on)			
		NRF : 1: hardware_revision_string: AN2301B-8275-00V01 2: Model_Number_String: AN2301B-0KG-001 3: Software_Revision_String:V0.0.7		
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN MM 除非另有说明的尺寸, 所有的单位都是毫米 LINEAR TOLERANCE 直线公差 BELOW 小于 6 到 30 ± 0.05 OVER 在 6 到 30 到 120 ± 0.07 OVER 在 30 到 120 到 315 ± 0.10 OVER 在 120 到 315 到 315 ± 0.15 OVER 在 315 ± 0.20 ANGULAR TOLERANCE 角度公差 BELOW 小于 5 到 15 ± 0.25 OVER 在 5 到 15 到 15 ± 0.5° OVER 在 15 ± 1.0°		DRAWN DATE 2022-06-08 CHECKED DATE APPROVED DATE Model Number P/N	Dongguan Anycon Intelligent Technology Co.,Ltd MODEL NAME AN2301B-0KG-001 PART NAME TEST SPECIFICATION DWG NO SH-22-112-A0 REV SIZE A4 SCALE 1 1 : SHEET 1 OF 1	



## 十. 遥控器(物料清单)/REMOTE CONTROL (BOM)

Part name/物料名称	Description/规格型号	Unit/单位	Qty/用量
结构部件部分			
COVER TOP/面壳	ABS黑色/ABS BLACK	PCS	1
COVER BOTTOM/底壳	ABS黑色/ABS BLACK	PCS	1
COVER BATTERY/电池盖	ABS黑色/ABS BLACK	PCS	1
IR WINDOW/镜片	PC黑色半透明/PC BLACK SEMI TRANSPARENT	PCS	1
RUBBER/导电胶	SILICON/硅胶	PCS	1
(+) SPRING/正极弹簧	Φ0.6mm镀镍钢线/Φ0.6 STEEL WIRE, NI PLATED	PCS	1
(-) SPRING/负极弹簧	Φ0.6mm镀镍钢线/Φ0.6 STEEL WIRE, NI PLATED	PCS	1
COMMON SPRING/连极弹簧	Φ0.6mm镀镍钢线/Φ0.6 STEEL WIRE, NI PLATED	PCS	1
DOME SHEET/锅仔片	腰形锅仔, 直径5mm, 19个键/DOME SHEET Φ5MM 19KEYS	PCS	1
SCREW/螺丝	PA1.7*6mm, 镀黑锌/Black Zinc plating	PCS	4
PROTECT FILM/保护膜	PE, 55*25*0.06mm	PCS	1
PE BAG/PE袋	PE, 260*75*0.05mm	PCS	1
整机包装箱			
CARTON BOX /纸箱	K=A, CORRUGATED PAPER/SIZE:565*340*205mm	PCS	0.0083
PAD/平卡	B3B, CORRUGATED PAPER/SIZE:550*325*3mm	PCS	0.0167
Y PATITION/纵刀卡	B3B, CORRUGATED PAPER/SIZE:550*186*3mm	PCS	0.0583
X PATITION/横刀卡	B3B, CORRUGATED PAPER/SIZE:325*186*3mm	PCS	0.0500
SKD包装箱			
CARTON BOX /纸箱	K=A, CORRUGATED PAPER/SIZE:560*475*205mm	PCS	0.0063
PAD/平卡	B3B, CORRUGATED PAPER/SIZE:545*460*3mm	PCS	0.0125
Y PATITION/纵刀卡	B3B, CORRUGATED PAPER/SIZE:550*186*3mm	PCS	0.0688
X PATITION/横刀卡	B3B, CORRUGATED PAPER/SIZE:325*186*3mm	PCS	0.0563
电子零件			
PCB/电路板	AN2301B-8275-00V01:T=1.2mm, OSP 碳油按键 绿油白字, 尺寸: 110.25	PCS	1
CHIP RESISTOR/贴片电阻	0402, 0R±5%, 1/16W	PCS	2
CHIP CONDENSOR/贴片电容	0402, 220pF±5%, NPO, 16V	PCS	1
CHIP LED/贴片LED灯	0603, 红色普亮	PCS	1
CHIP RESISTOR/贴片电阻	0402, 1K±5%, 1/16W	PCS	1
CHIP CONDENSOR/贴片电容	0603, 4.7uF±20%, Y5V, 6.3V	PCS	2
CHIP CONDENSOR/贴片电容	0402, 22nF±20%, Y5V, 16V	PCS	1
CHIP CONDENSOR/贴片电容	0402, 1uF±20%, Y5V, 6.3V	PCS	8
CHIP RESISTOR/贴片电阻	0402, 4.7K±5%, 1/16W	PCS	1
CHIP RESISTOR/贴片电阻	0402, 3K±5%	PCS	1
CHIP RESISTOR/贴片电阻	0805, 1R±5%, 1/8W	PCS	1
CHIP TRANSISTOR/贴片三极管	SS8050, SOT-23, IC=1.5A, Hfe=200	PCS	1
CHIP RESISTOR/贴片电阻	0402, 470R±5%, 1/16W	PCS	1
CHIP CRYSTAL/贴片晶振	3225, 24MHz, ±10PPM, CL=12pF	PCS	1
CHIP CONDENSOR/贴片电容	0402, 100nF±20%, Y5V, 16V	PCS	1
CHIP CONDENSOR/贴片电容	0402, 2.2uF±20%, Y5V, 6.3V	PCS	1
CHIP CONDENSOR/贴片电容	0805, 100nF±20%, Y5V, 16V	PCS	1
CHIP CONDENSOR/贴片电容	0805, 47uF±20%, X7R, 6.3V	PCS	1
IR LED/红外发射管	Φ3mm, 透明有边, GP1303C14B1-W247-3.6-940-YW 供应商: 厦门光莆	PCS	1
MIC/咪头	SMD电容咪, -42DB, 封装尺寸: 4013	PCS	1
IC/集成块	TLSR8275F512, QFN32	PCS	1