



PS No.	PS-064-2020-001
Version	01
Date	2020/4/27

# 继电器规格书

## RELAY SPECIFICATION

品名/Product Description     RJA-124DM  
零件编号/Part Number  
客户名/Customer

### 客户批准/Customer Approval

盖章处/STAMPING AREA

发行批准 / Issued by			
编制	审核	安规会签	批准
张金晶	陈选政	余艳	冯旭强



继电器规格书 Relay SPECIFICATION	型号 TYPE	RJA-124DM	产品编号 Part Number	PS No.:
1 <u>零件清单/PARTS LIST</u>				PS-064-2020-001
No.	零部件名称 Part Annd Components Name	材料名称 Matrial Name	备注 Remark	Ver
1	基座 Base	工程塑料 Industry plastic	UL94 V-0	01
2	骨架 Bobbin	工程塑料 Industry plastic	UL94 V-0	
3	外壳 Case	工程塑料 Industry plastic	UL94 V-0	
4	推片 Card	工程塑料 Industry plastic	UL94 V-0	
5	铁架 Yoke	电工纯铁 Iron		
6	衔铁 Armature	电工纯铁 Iron		
7	挂钩 Hinge	铜合金Cu Alloy		
8	C端子 C Terminal	铜合金Cu Alloy		
9	可动弹片 S. C. C	铜合金Cu Alloy		
10	铁芯 Core	电工纯铁 Iron		
11	M端子 M Terminal	铜合金Cu Alloy		
12	C接点 C Contact	银合金Ag Alloy		
13	M接点 M Contact	银合金Ag Alloy		
14	线圈端子 Coil Terminal	铜包钢 Cu coverd Steel		
15	线材 Wire	漆包线 EElectro magnetic Wire	Class F	

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<p>2. <u>性能/SPECIFICATIONS</u></p> <p>2.1 <u>驱动部分/COIL SPECIFICATIONS</u></p> <table border="0"> <tr> <td>2.1.1 额定电压</td> <td>24</td> <td>VDC (在20°C时)</td> </tr> <tr> <td>Rated Coil Voltage</td> <td>24</td> <td>VDC at 20°C</td> </tr> <tr> <td>2.1.2 额定功率</td> <td>0.45</td> <td>W (在20°C时)</td> </tr> <tr> <td>Nominal Power</td> <td>0.45</td> <td>W at 20°C</td> </tr> <tr> <td>2.1.3 线圈电阻</td> <td>1280</td> <td><math>\Omega \pm 10\%</math> (在20°C时)</td> </tr> <tr> <td>Coil Resistance</td> <td>1280</td> <td><math>\Omega \pm 10\%</math> (at 20°C)</td> </tr> <tr> <td>2.1.4 额定电流</td> <td>18.8</td> <td>mA<math>\pm 10\%</math> (在20°C时)</td> </tr> <tr> <td>Nominal Current</td> <td>18.8</td> <td>mA<math>\pm 10\%</math> (at 20°C)</td> </tr> <tr> <td>2.1.5 吸合电压</td> <td>18</td> <td>VDC以下 (在20°C时)</td> </tr> <tr> <td>Operate Voltage</td> <td>18</td> <td>VDC Max. at 20°C</td> </tr> <tr> <td>2.1.6 释放电压</td> <td>1.2</td> <td>VDC以上 (在20°C时)</td> </tr> <tr> <td>Release Voltage</td> <td>1.2</td> <td>VDC Min. at 20°C</td> </tr> <tr> <td>2.1.7 最大连续施加电压</td> <td>31.2</td> <td>VDC Max. 130%额定电压</td> </tr> <tr> <td>Max Power</td> <td>31.2</td> <td>VDC Max. 130%of Nominal</td> </tr> </table> <p>2.2 <u>开关部/CONTACT SPECIFICATION</u></p> <table border="0"> <tr> <td>2.2.1 开关类型</td> <td colspan="2">单刀常开型</td> </tr> <tr> <td>Contact Configuration</td> <td colspan="2">1 Form A</td> </tr> <tr> <td>2.2.2 接点规格</td> <td>5</td> <td>A 250VAC (阻性负载)</td> </tr> <tr> <td>Contact Rating</td> <td>5</td> <td>A @250VAC (Resistive)</td> </tr> <tr> <td>2.2.3 接触电阻</td> <td>100</td> <td>m<math>\Omega</math> 以下, (初期值, DC 24V/1A条件下)</td> </tr> <tr> <td>Contact Resistance</td> <td>100</td> <td>m<math>\Omega</math> Max. @ Initiate, DC 24V/1A</td> </tr> <tr> <td></td> <td>500</td> <td>m<math>\Omega</math> 以下, (寿命试验后, DC 24V/1A条件下)</td> </tr> <tr> <td></td> <td>500</td> <td>m<math>\Omega</math> Max. @ After Life, DC 24V/1A</td> </tr> <tr> <td>2.2.4 吸合时间</td> <td>10</td> <td>ms 以下 (额定电压下)</td> </tr> <tr> <td>Operate Time</td> <td>10</td> <td>ms Max. @ Rated Voltage</td> </tr> <tr> <td>2.2.5 释放时间</td> <td>5</td> <td>ms 以下 (施加额定电压后断开时)</td> </tr> <tr> <td>Release Time</td> <td>5</td> <td>ms Max. @ Rated Voltage</td> </tr> <tr> <td>2.2.6 最大动作频率</td> <td>300</td> <td>次/分 (无负载)</td> </tr> <tr> <td>Max. Switching Rate</td> <td>300</td> <td>ops./min. (no load).</td> </tr> <tr> <td></td> <td>6</td> <td>次/分 (额定负载)</td> </tr> <tr> <td></td> <td>6</td> <td>ops./min. (Rated load)</td> </tr> </table>					2.1.1 额定电压	24	VDC (在20°C时)	Rated Coil Voltage	24	VDC at 20°C	2.1.2 额定功率	0.45	W (在20°C时)	Nominal Power	0.45	W at 20°C	2.1.3 线圈电阻	1280	$\Omega \pm 10\%$ (在20°C时)	Coil Resistance	1280	$\Omega \pm 10\%$ (at 20°C)	2.1.4 额定电流	18.8	mA $\pm 10\%$ (在20°C时)	Nominal Current	18.8	mA $\pm 10\%$ (at 20°C)	2.1.5 吸合电压	18	VDC以下 (在20°C时)	Operate Voltage	18	VDC Max. at 20°C	2.1.6 释放电压	1.2	VDC以上 (在20°C时)	Release Voltage	1.2	VDC Min. at 20°C	2.1.7 最大连续施加电压	31.2	VDC Max. 130%额定电压	Max Power	31.2	VDC Max. 130%of Nominal	2.2.1 开关类型	单刀常开型		Contact Configuration	1 Form A		2.2.2 接点规格	5	A 250VAC (阻性负载)	Contact Rating	5	A @250VAC (Resistive)	2.2.3 接触电阻	100	m $\Omega$ 以下, (初期值, DC 24V/1A条件下)	Contact Resistance	100	m $\Omega$ Max. @ Initiate, DC 24V/1A		500	m $\Omega$ 以下, (寿命试验后, DC 24V/1A条件下)		500	m $\Omega$ Max. @ After Life, DC 24V/1A	2.2.4 吸合时间	10	ms 以下 (额定电压下)	Operate Time	10	ms Max. @ Rated Voltage	2.2.5 释放时间	5	ms 以下 (施加额定电压后断开时)	Release Time	5	ms Max. @ Rated Voltage	2.2.6 最大动作频率	300	次/分 (无负载)	Max. Switching Rate	300	ops./min. (no load).		6	次/分 (额定负载)		6	ops./min. (Rated load)
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<b>2.3 特性/GENERAL SPECIFICATION</b>					PS-064-2020-001	
2.3.1 绝缘电阻 Insulation Resistance	1000	MΩ以上 (500VDC) MΩ Min@500VDC				Ver
2.3.2 介质耐压 Dielectric Strength	1000	VAC/分钟(接点间) 4000 VAC/分钟(线圈/接点间)				
	1000	VAC@50/60Hz 1 min.(Between Open Contacts)				
	4000	VAC@50/60Hz 1 min.(Between Coil and Contacts)				
2.3.3 电气寿命 Electrical Life	1×10 <sup>5</sup>	次以上 (常温, 额定负载,通断比: 1S:9S) 1×10 <sup>5</sup> Cycle Min. @Room Temperature,Rate Load,ON:OFF:1S:9S				
2.3.4 机械寿命 Mechanical Life	1×10 <sup>7</sup>	次以上 (无负载) 1×10 <sup>7</sup> Cycle Min. @no load				
2.3.5 线圈温升 Coil Temperature Rise:	70K Max.	(线圈电压: 110%, 额定负载, 环境温度: 85℃) 70K Max. (Coil Voltage:110%,Rate Load, Environmental Temperature:85℃)				
2.3.6 使用环境温度 Temperature	-40~85	℃ (无凝结时) -40~85 ℃ @no condensation				
2.3.7 使用环境湿度 Humidity	20~85%	RH (无凝结时) 20~85% RH @no condensation				
2.3.8 抗振动 Vibration	耐久 Mechanical	10~55 Hz, 双振幅 1.5mm 10 to 55 Hz, 1.5mm double amplitude				
	误动作 Operational	10~55 Hz, 双振幅2.5mm 10 to 55 Hz, 2.5mm double amplitude				
2.3.9 抗冲击 Shock	耐久 Mechanical	980 m/s <sup>2</sup> Min (约100G) 980 m/s <sup>2</sup> Min (100G approximately)				
	误动作 Operational	98 m/s <sup>2</sup> Min (约10G) 98 m/s <sup>2</sup> Min (10G approximately)				
2.3.10 重量约 Weight About	5.7	克 g				
2.3.11 焊锡条件 Solder ability	5s	@ 260℃ (波峰焊) @ 260℃ (wave soldering)				
2.3.12 储存期限 Storage period	1	年 year				
<b>2.4 端子性能/TERMINAL CHARACTERSITICS</b>						
2.4.1 端子强度 Terminals strength	5牛/10秒, 任意方向静态压力, 无异常, 但端子弯曲可以 5N 10s,There shall be no abnormalities. (The curving of the terminal shall be acceptable)					
2.4.2 可焊性 Terminal solderbility	260±5℃ 3s, 端子头部3mm部分90%以上的面积有锡覆盖 (无铅焊锡) 260±5℃ 3s, In Case of lead lead free solder, 90% of the dipped portion shall be solderd.					
2.4.3 耐热性 Soldering Heat Resistance	5s @ 260℃,端子头部3mm浸入锡中, 无异常发生 5s @ 260℃,There shall be no abnormalities. (wave soldering)					

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PS No.: PS-064-2020-001  
Ver: 01

## 2.5 安全规格/SAFETY REQUIREMENTS

2.5.1 UL规格认定 (UL & C-UL)  
UL (UL & C-UL)

档案号:  
File No.:



2.5.2 CQC标志认证  
CQC

证书编号:  
Certificate No.:



2.5.3 TUV规格认定  
TUV

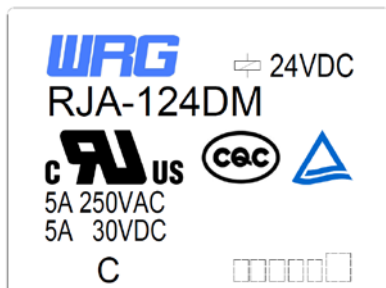
证书号  
Certificate No.



2.5.4 产品符合ROHS和REACH要求。

The product meets the requirements of ROHS & REACH.

## 3. 捺印图/Mark Layout



印字方式: 激光印字  
Printing: laser printing.

### Batch No. Identification:

H □ □ □ □

- 1、Manufactory:  
Blank: Shenzhen; H: Huangshan
- 2、Year  
The last two digits of the year.
- 3、Week  
Production of the current week.
- 4、Lot No.  
(A,B,C,.....Z) OR (AA,BB,CC,.....ZZ)

## 4 订货标记/Ordering Information

RJ - 1 24 D M -XXX

① ② ③ ④ ⑤ ⑥

- |                              |                |
|------------------------------|----------------|
| ① 产品型号 Model designation     | RJA            |
| ② 接点组数 Number of poles       | 1:1组 (1 pole)  |
| ③ 线圈电压 Coil voltage          | 24:24V         |
| ④ 功率 Coil Power              | D:0.45W        |
| ⑤ 接点结构 Contact configuration | M:常开型 (Form A) |
| ⑥ 特殊参数 Special request       |                |

## 5 其他说明/Others

5.1 除非特别申明，测试或试验的标准环境条件如下：

Unless otherwise explicitly stated, the standard environment conditions for measurement or testing are listed as following:

5.1.1 环境温度：23±5℃

Ambient temperature is 23±5℃

5.1.2 大气压力：96±10%kPa

Atmospheric pressure is 96±10%kPa

5.1.3 相对湿度：25%~75% RH

Relative humidity is 25%~75% RH

5.2 非密封型继电器需要防止助焊剂或污染物进入继电器。

Unsealed relays should prevent flux or contamination into the relay.

5.3 密封型继电器/Sealed relay

5.3.1 对于密封型产品，在焊接完成后，如果需要清洗，请告知敝司。

Regarding the sealed relays, If cleaning is necessary after welding, please contact us.

5.3.2 推荐在室温条件下，尽可能短的时间内完成清洗过程。不建议用热水清洗塑胶外壳型继电器，因为水可能进入继电器。

It will be recommendable to make washing process in possible short time with normal room temperature solution. Washing process by hot water is not recommendable for plastic cased relay as the water immersion-problem into relay may be caused.

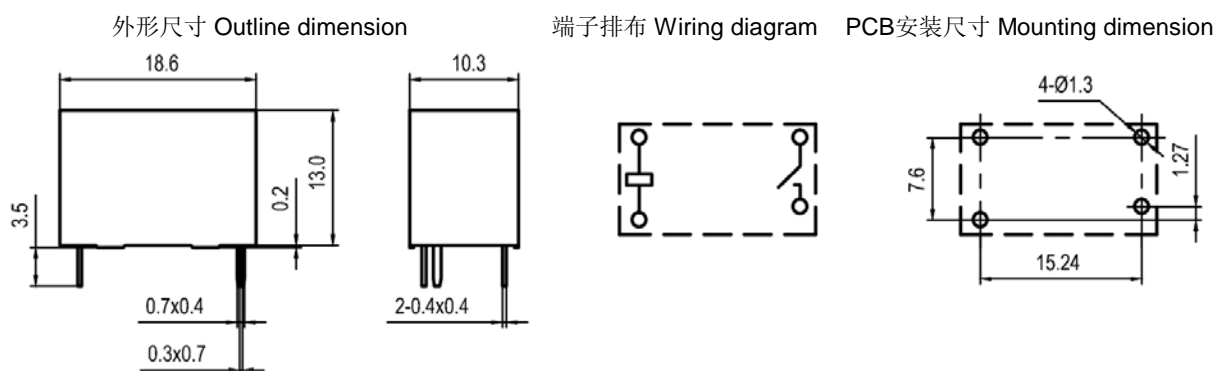
5.3.3 不建议用超声波清洗设备清洗塑胶外壳型继电器，因为继电器触点可能被超声波能量轻微粘滞。Ultraonic washing machine's cleaning for plastic cased relay is not recommendable as the relay's contact may be slightly stuck by ultrasonic wave energy.

5.4 避免在强磁条件下使用继电器，外界磁场会造成继电器动作和释放等参数发生变化。

To avoid using the relays under strong magnetic field because it will change the parameters of relay such as pull-in and drop-out voltage.

5.5 为了保持继电器的性能，请注意不要使继电器掉落或受到强冲击。掉落后的继电器建议不要使用。To maintain the performances of relays, please do not make the relay drop or be shocked strongly. Suggest that the relays dropped not be used.

## 6 外形尺寸及安装孔位尺寸/Outline dimension、PCB Layout:



备注：(1)产品外形尺寸未注尺寸公差，当外形尺寸≤1mm时，公差为±0.2mm；  
当外形尺寸1mm~5mm时，公差为±0.3mm；当外形尺寸≥5mm时，公差为±0.5mm。  
(2)安装尺寸未注公差为±0.1mm

### 注/Remark

以中文版为准，英文版仅供参考。

Chinese version is the standard one, English version is only for information.

结束/<END>