



陕西电子信息集团

Shaanxi Electronic Information Group

陕西群力电工有限责任公司

Shaanxi Qunli Electric Co., Ltd.

## 产 品 规 格 确 认 书

Specification for Approval

客户名称 Customer:

产品名称 Product Name: 功率继电器 Power Relay产品型号 Product Model: JZC-11F/012-1H1(5A)发行日期 Date: 2025 年 1 月 15 日有效期 Period of Validity: 二年 Two Years版本 Version: 1

|                             |             |                                        |          |
|-----------------------------|-------------|----------------------------------------|----------|
| 群力电工审批签字 Signature by Qunli |             | 客户签字或盖章 Stamp or signature by customer |          |
| 批准<br>Approved              | 审核<br>Check | 拟制<br>Make                             | 负责人 By:  |
| 赵俊恺                         | 刘新刚         | 侯京琼                                    | 日期 Date: |
|                             |             |                                        |          |

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产品规格书

客户 Customer:

1. 品名:

Type Model:

- 1.1 种类: 功率继电器  
Kinds: Power relay
- 1.2 型号: JZC-11F/012-1H1(5A)  
Type:
- 1.3 外形尺寸: 18.7mm×10.5mm×15.5mm  
Outline:
- 1.4 触点形式 1 组常开  
Contact Arrangement: 1 FormA
- 1.5 触点材料 银合金  
Contact Material: Silver Alloy

2. 线圈参数:

Coil Rating:

- 2.1 额定电压 12Vd.c.  
Rated Voltage:
- 2.2 线圈电阻  $320 \times (1 \pm 10\%) \Omega$   
Coil Resistance:
- 2.3 额定功耗 0.45W  
Normal Operating Power: Coil: 0.45W
- 2.4 最大允许线圈电压 12Vd.c.  
Max. Allowable Coil Voltage:

表 1 规格参数 Table 1: Coil date

| 规格<br>序号<br>Type No. | 额定电压<br>(Vd. c.)<br>Rated Voltage<br>(Vd. c) | 动作电压<br>Vd. c. (max)<br>Operate Voltage (Vd. c) | 释放电压<br>Vd. c. (min)<br>Release Voltage (Vd. c) |
|----------------------|----------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| 012                  | 12                                           | 9                                               | 0.84                                            |

### 3. 触点参数

#### Contace Specification

3.1 触点额定负载: 5A 30Vd.c/250Va.c  
Contact Rating

3.2 最大切换电流: 5A  
Max. Contact Current:

3.3 最大切换电压: 30Vd.c/250Va.c  
Max. Contact Voltage:

3.4 接触电阻:  
Contace Resistance: 100mΩ Max.

### 4. 性能

#### Performance

4.1 动作时间:  $\leq 10\text{ms}$   
Operate Time  
释放时间:  $\leq 2\text{ms}$   
Release Time

4.2 寿命  
Life

4.2.1 电耐久性:  $1 \times 10^5$  次, 动作频率为 6 次/分钟, 通断比 1:9  
Electrical Endurance: Operating frequency 6 ops/min, On-off ratio 1:9

4.2.2 机械耐久性:  $5 \times 10^6$  次, 无负载, 动作频率为 300 次/分钟  
Mechanical Endurance: No load at operating frequency of 300 ops/min

4.3 介质耐压  
Dielectric Strength

4.3.1 断开触点间: 750VAC (50Hz 1min)  
Between open contacts:

4.3.2 触点与线圈间: 3000VAC (50Hz 1min)  
Between coil to open contacts:

4.4 绝缘电阻  
Insulation Resistance

|                                                 |                                                                                                                                                                                                                                                    |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.4.1 断开触点间:<br>Between open contacts:          | 100M $\Omega$ (500Vd.c.)                                                                                                                                                                                                                           |
| 4.4.2 触点与线圈间:<br>Between coil to open contacts: | 100M $\Omega$ (500Vd.c.)                                                                                                                                                                                                                           |
| 4.5 振动<br>Vibration:                            | 10~55Hz, 双振幅 1.5mm, 继电器外观、结构和性能不应有异常。<br>10Hz to 55Hz, Double amplitude 1.5mm, It shall be no abnormalities in appearance, construction and performance.                                                                                           |
| 4.6 冲击<br>Shock                                 |                                                                                                                                                                                                                                                    |
| 稳定性:<br>Malfunction:                            | 98m/s <sup>2</sup> (10g), 三个相互垂直轴线的每一个方向 6 次, 闭合回路的断开或断开回路的闭合时间应不超过 1ms。<br>98m/s <sup>2</sup> (10g), 6 shocks (each direction of X, Y, Z), No opening of any closed contact circuit or no closing of any opened contact circuit shall exceed 1ms. |
| 4.7 引出脚强度:<br>Terminal Strength:                | 在垂直于引出脚方向上施加 5N 的拉力 10S, 继电器应无异常 (引出脚微弯可以接受)。<br>At push in direction the terminal can endure 2.5N force for 10s, It shall be no Abnormalities. (a little curving of the terminals shall be acceptable)                                            |
| 4.8 耐焊接热:<br>Soldering Heat Resistance:         | (260 $\pm$ 5) $^{\circ}$ C, (5 $\pm$ 1) s, 继电器应无异常。<br>There shall be no Abnormalities.                                                                                                                                                            |
| 4.9 焊接性能:<br>Soldering Ability:                 | (250 $\pm$ 5) $^{\circ}$ C, (3 $\pm$ 0.5) s, 引出端被浸锡部分应有 80% 以上连续覆盖一层锡层。<br>80% of the dipped portion shall be soldered.                                                                                                                            |
| 4.10 耐温性<br>Temperature Resistance              |                                                                                                                                                                                                                                                    |
| 4.10.1 耐热:<br>Heat Resistance:                  | 85 $^{\circ}$ C 温度中放置 2h, 恢复常温后, 继电器的结构及性能应无异常。<br>Must be free from any abnormality in both the construction and characteristics after the relay is lift in a temperature of 85 $^{\circ}$ C for 2 hours and then in room temperature             |
| 4.10.2 耐寒<br>Cold Resistance:                   | -30 $^{\circ}$ C 温度中放置 2h, 恢复常温后, 继电器的结构及性能应无异常。<br>Must be free from any abnormality in both the construction                                                                                                                                     |

and characteristics after the relay is lift in a temperature of  
-30℃ for 2 hours and then in room temperature

## 5. 产品标识

### Marking

5.1 外壳颜色: 黑色  
Case Color: Black

5.2 印字位置: 顶面  
Marking Position: Top

## 6. 使用条件

### Operating Condition

6.1 温度: -30℃~85℃  
Temperature:

6.2 湿度: 45%~85%RH  
Humidity:

## 7. 储存条件

### Storage Condition

7.1 温度: 0℃~40℃  
Temperature:

7.2 湿度: 20%~80%RH  
Humidity:

7.3 环境:  
Environment:

7.3.1 产品储存场地不能有腐蚀性气体。  
Store in locations where the product is not exposed to  
corrosive gas

7.3.2 储存中应避免阳光直照产品。  
Keep product is not exposed to the direct ray of the sun.

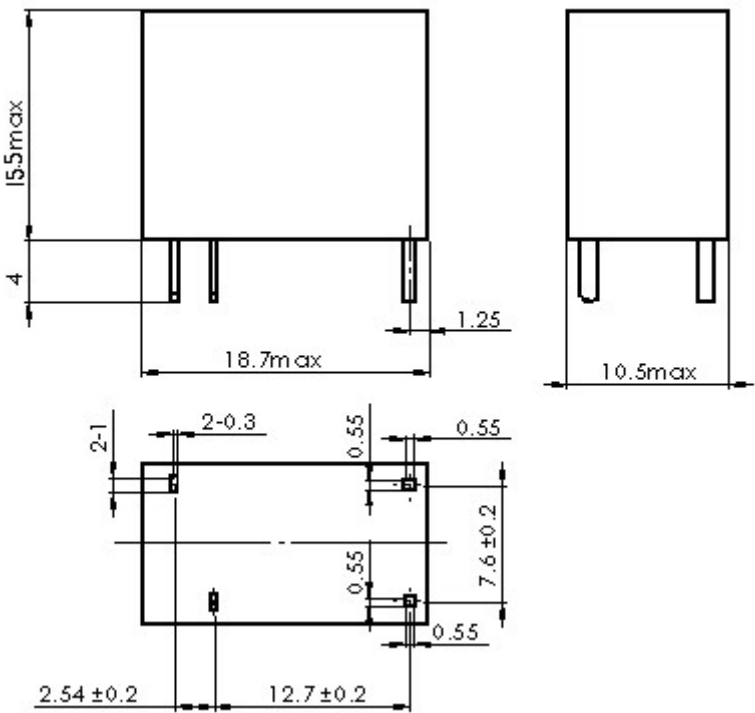
## 8. 产品结构



**Configuration**

8.1 外形图:

Outline Schematic:



8.2 接线图:

Wiring Diagram:



8.3 外形尺寸及公差:

Outline Dimensions and Tolerance:

8.3.1 产品外形尺寸未注明尺寸公差:

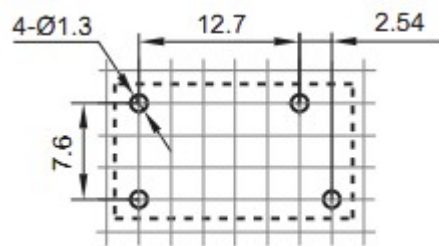
Outline dimensions hadn't specified tolerance:

外形尺寸 $\leq 1\text{mm}$ , 公差为 $\pm 0.2\text{mm}$ ,  
外形尺寸在 $1\sim 5\text{mm}$ 之间时, 公差为 $\pm 0.3\text{mm}$ ,  
外形尺寸 $\geq 5\text{mm}$ , 公差为 $\pm 0.5\text{mm}$ ;  
Outline Dimensions  $\leq 1\text{mm}$ , Tolerance $\pm 0.2\text{mm}$   
Outline Dimensions  $1\sim 5\text{mm}$ , Tolerance $\pm 0.3\text{mm}$   
Outline Dimensions  $\geq 5\text{mm}$ , Tolerance $\pm 0.5\text{mm}$

8.3.2 PC 板未注尺寸公差:

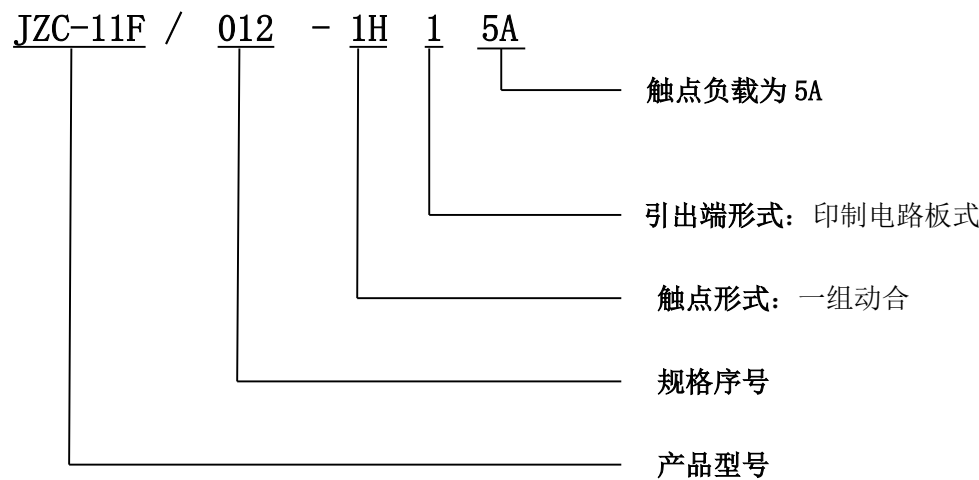
PC board dimensions hadn't specified tolerance:

$\pm 0.1\text{mm}$ ,



9. 订货标记示例

Ordering Information



备注：当继电器需整体清洗时，请在订货时注明，我们将提供防焊剂型产品。

10. 其它

Others

10.1 环保措施：产品符合 RoHS REACH 要求。

Environmental Protection: Products are all RoHS REACH compliant.

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

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

10.3 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再使用。

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.