

# MPQ1

## 家电应用

### Household Appliances Applications

- 适用于家电及新能源领域
- 触点与线圈间耐压 3.5KV
- 敞开型，塑封型和防尘罩型可供选择
- F 级线圈绝缘等级
- 外形尺寸 L×W×H: 31.8×27.1×19.4mm
- Applicable to home appliances and new energy fields
- 3.5KV Dielectric strength between coil and contacts
- Open type, sealed and dust protected available
- Class F insulation available
- Profile Dimension L×W×H: 31.8×27.1×19.4mm



MPQ1 - S - 1 12 D - A - 6 - 01

产品型号 Model	产品结构 Structure	触点组数 Number of Poles	线圈电压 Coil Voltage	线圈电源 Coil Power	触点形式 Contact Form	引出端形式 Termination	特殊参数 Special parameters
	S: 塑封型 无: 防尘罩型 S: Wash tight Nil: Dust cover type	1: 1组 1 Pole	05, 06, 09 12, 18, 24 48, 110VDC	D: 直流 DC	A: 常开 NO B: 常闭 NC C: 转换 NO/NC	6: 有 6 号引出脚 无: 没有 6 号引出脚 6: With #6 Terminal Nil: Without #6 Terminal	无: 标准型; 数字或字母: RTIII 或其他 Nil: Standard type; Numbers or letters: RTIII or other

### 触点参数 CONTACT PARAMETERS

触点形式 Contact Form	1a, 1b, 1c
触点材料 Contact Material	银合金 Silver Alloy
接触电阻 Contact Resistance( 初始 Initial)	≤ 50mΩ (1A 6VDC)
额定负载 ( 阻性 ) Rated Load(Resistive)	NO: 30A 250VAC/30VDC
	NO: 40A 250VAC
	NC: 20A 250VAC/30VDC
最大切换电流 Max. Switching Current	NO/ NC: 40A/20A
最大切换电压 Max. Switching Voltage	250VAC/30VDC
最大切换功率 Max. Switching Power	10000VA/1200W
电气寿命 Electrical Life	1×10 <sup>5</sup> 次 OPS
机械寿命 Mechanical Life	1×10 <sup>6</sup> 次 OPS

## 性能参数 CHARACTERISTICS

绝缘电阻 Insulation Resistance	1000MΩ(at 500VDC)	
介质耐压 Dielectric Strength	触点与线圈间 Between Coil & Contacts: 3500VAC 1min	
	断开触点间 Between Open Contacts: 1500VAC 1min	
动作时间 Set time	≤ 15ms	
复归时间 Reset time	≤ 10ms	
环境温度 Ambient Temperature	-40°C ~+105°C (20,30A) -40°C ~85°C (40A)	
振动 Vibration	10Hz~55Hz 1.5mm 双振幅 (DA)	
冲击 Shock	功能性的 Functional	98m/s <sup>2</sup> (10G)
	破坏性的 Destructive	980m/s <sup>2</sup> (100G)
引出端形式 Termination	印制板式 PCB	
封装形式 Construction	敞开型 Unenclosed	
	塑封型 Wash tight	
	防尘罩型 Dust Protected	
重量 Unit Weight	约 Approx.35g	

## 线圈规格表 COIL DATA(23°C)

额定电压 Rated Voltage VDC	动作电压 Operate Voltage VDC	释放电压 Release Voltage VDC	最大容许电压 Max Allowable Voltage	线圈电阻 Coil Resistance Ω±10%	线圈功耗 Coil Power W
5	≤ 3.75	≥ 0.25	7.5	28	约 Approx. 0.9
6	≤ 4.5	≥ 0.3	9	40	
9	≤ 6.75	≥ 0.45	13.5	90	
12	≤ 9.0	≥ 0.6	18	160	
18	≤ 13.5	≥ 0.9	27	360	
24	≤ 18	≥ 1.2	36	640	
48	≤ 36	≥ 2.4	72	2560	约 Approx. 2.25
5	≤ 3.75	≥ 0.25	7.5	11	
9	≤ 6.75	≥ 0.45	13.5	36	
12	≤ 9.0	≥ 0.6	18	64	
24	≤ 18	≥ 1.2	36	256	
48	≤ 36	≥ 2.4	72	1024	

## 安全认证 SAFETY STANDARD APPROVALS

安全认证 Safety Standard Approvals	UL	TUV	CQC
证书编号 Certificate No.	E358149	R50184977	CQC10002051838
负载 Rating	1A:30A 240VAC/30VDC 1B:20A 240VAC/30VDC 1C(NO):30A 240VAC 20A 30VDC 1C(NC):20A 240VAC/30VDC	1A:30A 240VAC/30VDC 1C(NO):20A 240VAC/30VDC 1C(NC):10A 240VAC/30VDC	NO:30A 250VAC/30VDC 40A 250VAC 30A 240VAC NC:20A 240VAC/30VDC 30A 250VAC 20A 250VAC

## 外形尺寸, 接线图, 安装孔尺寸 PROFILE DIMENSION, WIRING DIAGRAM AND PCB LAYOUT

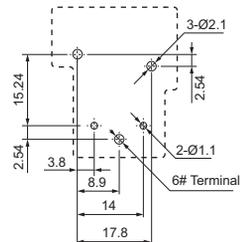
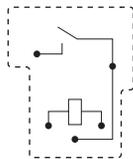
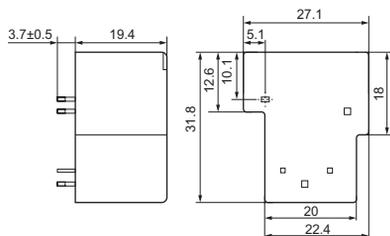
单位 Unit: mm

外形尺寸 Profile Dimension

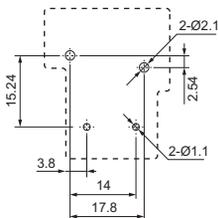
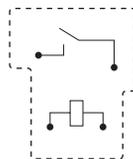
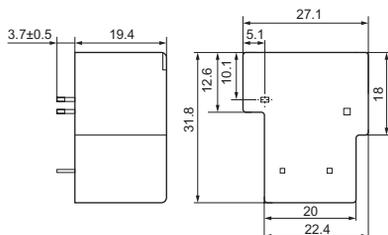
接线图 Wiring Diagram 安装孔尺寸 PCB Layout

一组常开 (1 Form A)

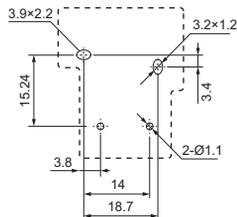
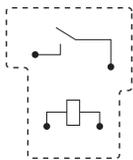
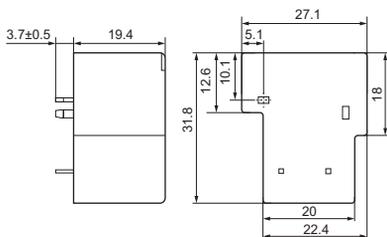
包含 6 号引出脚 With #6 Terminal



不包含 6 号引出脚 Without #6 Terminal



不包含 6 号引出脚 Without #6 Terminal (40A 2.25W)



## 外形尺寸, 接线图, 安装孔尺寸 PROFILE DIMENSION, WIRING DIAGRAM AND PCB LAYOUT

单位 Unit: mm

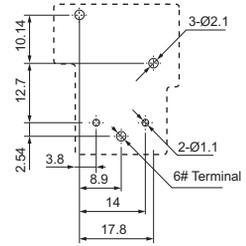
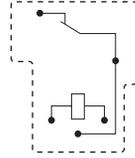
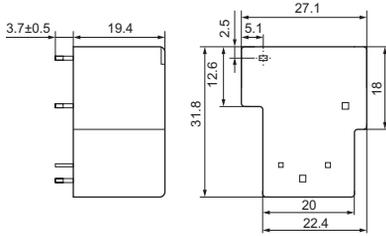
外形尺寸 Profile Dimension

接线图 Wiring Diagram

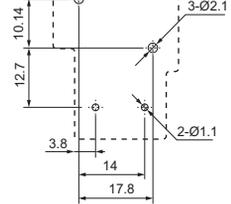
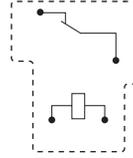
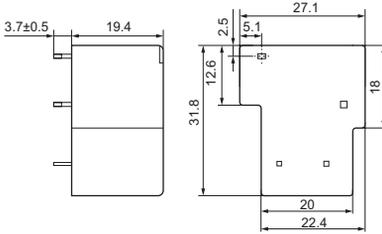
安装孔尺寸 PCB Layout

一组常闭 (1 Form B)

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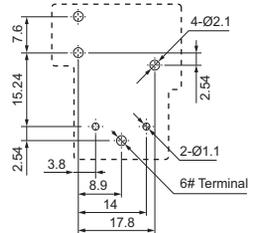
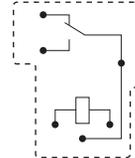
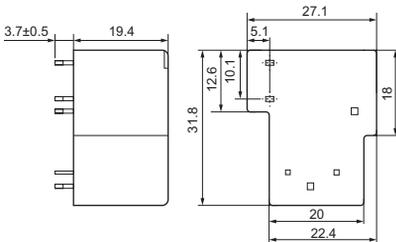


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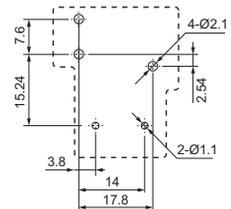
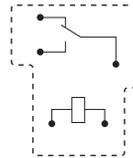
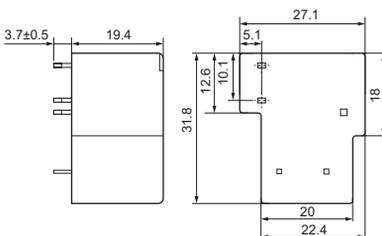


一组转换 (1 Form C)

包含 6 号引出脚 With #6 Terminal



不包含 6 号引出脚 Without #6 Terminal



## 外形尺寸, 接线图, 安装孔尺寸 PROFILE DIMENSION, WIRING DIAGRAM AND PCB LAYOUT

单位 Unit: mm

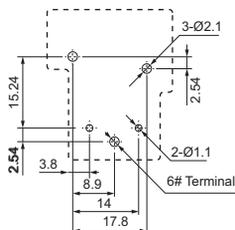
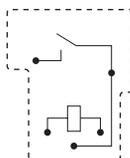
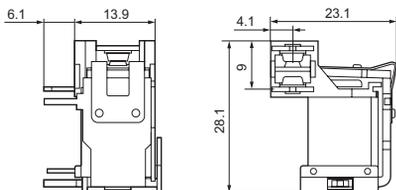
外形尺寸 Profile Dimension

接线图 Wiring Diagram

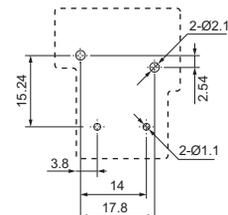
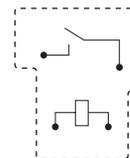
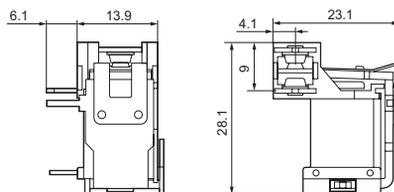
安装孔尺寸 PCB Layout

敞开型一组常开 (1 Form A Unenclosed)

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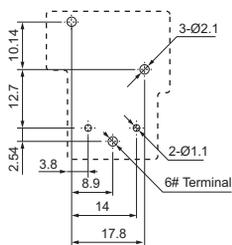
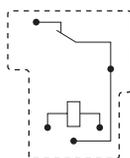
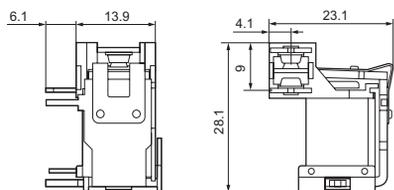


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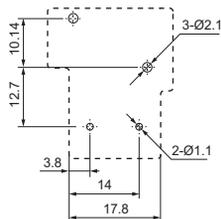
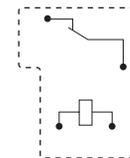
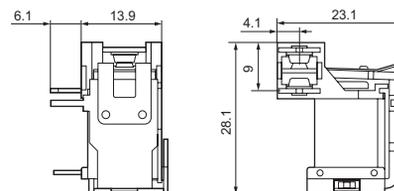


敞开型一组常闭 (1 Form B Unenclosed)

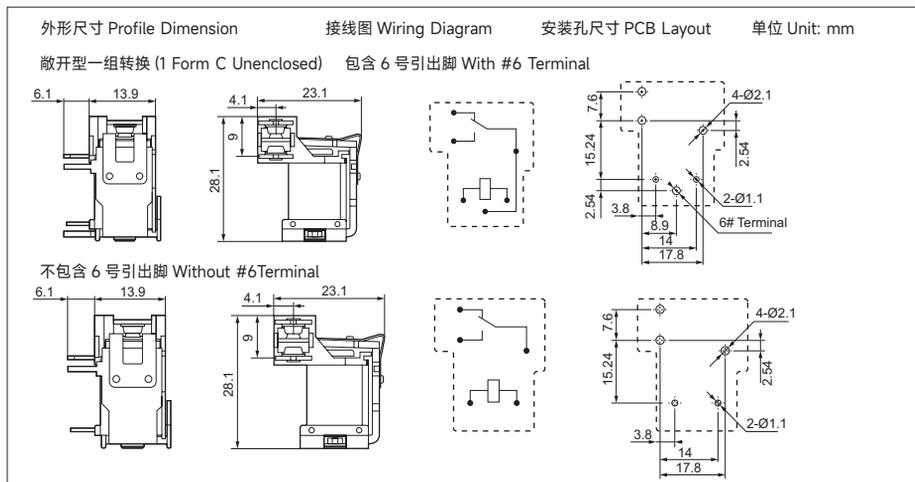
包含 6 号引出脚 With #6 Terminal



不包含 6 号引出脚 Without #6 Terminal



## 外形尺寸, 接线图, 安装孔尺寸 PROFILE DIMENSION, WIRING DIAGRAM AND PCB LAYOUT



### 备注 Notes:

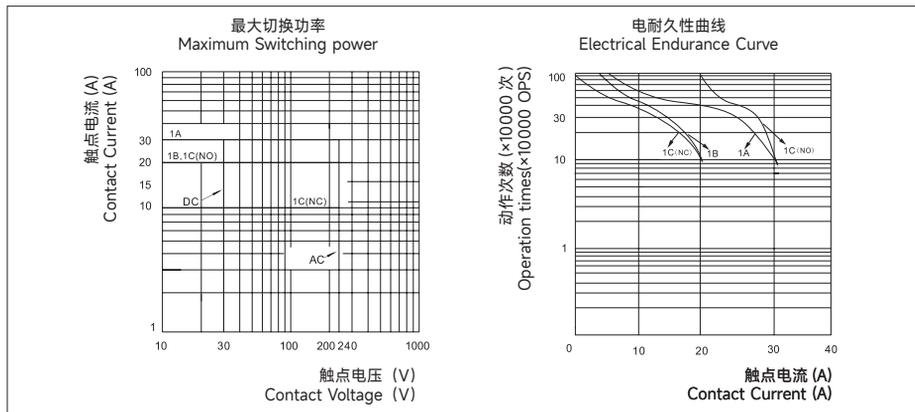
1) 产品部分外形尺寸未注尺寸公差, 当外形尺寸 $\leq 1\text{mm}$ , 公差为 $\pm 0.2\text{mm}$ ; 当外形尺寸在 $1\text{--}5\text{mm}$ 之间时, 公差为 $\pm 0.3\text{mm}$ ; 当外形尺寸 $> 5\text{mm}$ 时, 公差为 $\pm 0.4\text{mm}$ 。

In case of no tolerance shown in outline dimension: outline dimension  $\leq 1\text{mm}$ , tolerance should be  $\pm 0.2\text{mm}$ ; outline dimension  $> 1\text{mm}$  and  $\leq 5\text{mm}$ , tolerance should be  $\pm 0.3\text{mm}$ ; outline dimension  $> 5\text{mm}$ , tolerance should be  $\pm 0.4\text{mm}$ ;

2) 安装孔尺寸中未注尺寸公差的均为 $\pm 0.1\text{mm}$ 。

The tolerance without indicating for PCB layout is always  $\pm 0.1\text{mm}$ .

## 性能曲线图 PERFORMANCE CURVE



## 声明 STATEMENT:

1. 本产品规格书仅供客户使用时参考, 若有更改, 恕不另行通知。

This product specification for client's reference, if any change without notice.

2. 对美硕而言, 不可能评定继电器在每个具体应用领域的所有性能参数要求, 因而客户应该根据具体的使用条件选择与之相匹配的产品, 若有疑问, 请与美硕联系获取更多的技术支持。但产品选型责任仅由客户负责。

MEISHUO cannot evaluate all performance parameters for each specific application. Customers should select products based on matching conditions. For technical support, please contact us. Product selection responsibility lies solely with the customer.

本目录虽经多次校对以求正确，但仅供参考之用，一切以产品实物为准。  
Although this catalogue has been proofread for many times, it is only for reference.  
All items are subject to the actual products.



继电器综合样本

RELAYS COMPONENTS



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