

### 特性 FEATURES

- 超小型
- 线圈功率小
- 单、双继电器可选
- 外形尺寸: 17.35 × 16.85 × 13.2mm
  
- Small size, light weight
- Low coil power
- Single relay and dual-bank relay available
- Outline dimensions: 17.35 × 16.85 × 13.2mm

### 触点参数 CONTACT PARAMETERS

触点形式	Contact Arrangement	1C: 单继电器 Single Relay 2C: 双继电器 Dual-bank Relay
触点材料	Contact Material	银合金 Silver Alloy
接触压降 (初始)	Voltage Drop(Initial)	典型值 Typ. 50mV, 最大值 Max. 300mV (at 10A)
最大连续电流	Max. Continuous Current	25A
最大切换电压	Max. Switching Voltage	40VDC
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 FUNCTION PARAMETERS

绝缘电阻	Insulation Resistance	100M $\Omega$ (500VDC)
介质耐压	Dielectric Strength	触点与线圈间 Between Coil & Contacts: 500VAC 1min
		断开触点间 Between Open Contacts: 500VAC 1min
动作时间	Operate Time	≤10ms
释放时间	Release Time	≤10ms
环境温度	Ambient Temperature	-40 $^{\circ}$ C ~+85 $^{\circ}$ C
振动	Vibration	10Hz~500Hz, 49m/s <sup>2</sup> (5G)
冲击	Shock	294m/s <sup>2</sup> (30G)
引出端方式	Terminal Form	印刷电路板引出端 PCB
封装形式	Construction	塑封型 Sealed
重量	Unit Weight	约 Approx.: 10g

### 线圈规格表 COIL DATA(23 $^{\circ}$ C )

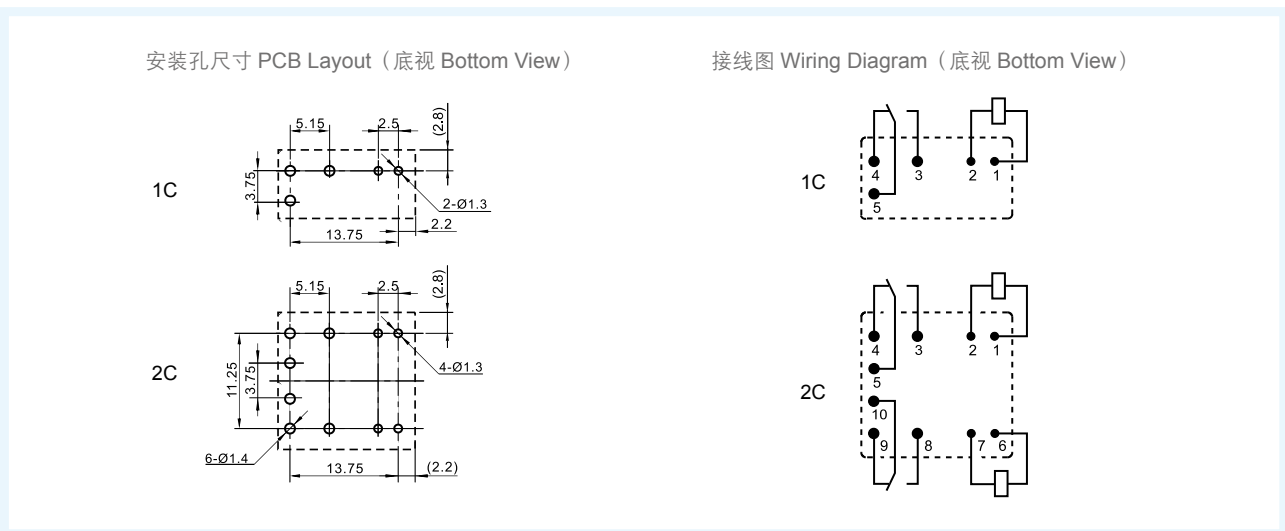
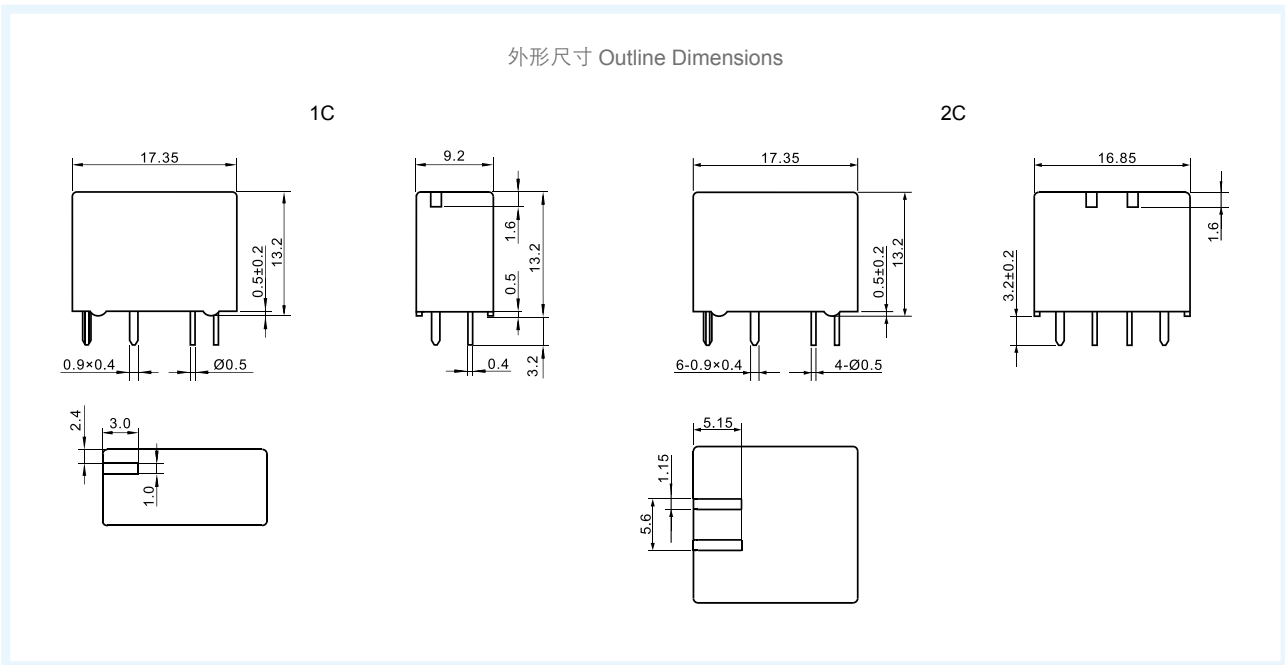
	额定电压 Rated Voltage VDC	动作电压 Operate Voltage VDC	释放电压 Release Voltage VDC	线圈电阻 Coil Resistance $\Omega \pm 10\%$	线圈功率 Coil Power W	允许最大线圈电压 <sup>(1)</sup> Max Allowable Overdrive Voltage VDC	
						20 $^{\circ}$ C	85 $^{\circ}$ C
标准型 Standard	12	≤7.2	≥1.0	255	0.56	20	16
低动作电压型 Low Operate Voltage	12	≤5.8	≥0.8	178	0.81	17	13.5

注意: (1) 触点无负载电流、线圈电阻为最小值情况下, 继电器线圈允许施加的最大连续工作电压。  
 Note: (1) Max. Allowable overdrive voltage is stated with no load applied minimum coil resistance.

## 订货标记示例 ORDERING INFORMATION

			MAQ	-S	-2	12	-C	-P
产品型号	Model:	MAQ						
产品结构	Structure:	S: 塑封型 Sealed						
触点组数	Contact Group:	1: 单继电器 Single Relay 2: 双继电器 Dual-bank Relay						
线圈电压	Coil Voltage:	12:12V						
触点形式	Contact Form:	C: 转换 NO/NC						
动作电压类型	Operate Voltage Type:	无 nil: 标准型 Standard P: 低动作电压型 Low Operate Voltage						

## 外形尺寸、接线图、安装孔尺寸 OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB LAYOUT (单位 Unit: mm)



## 备注:

(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  $1\sim 5\text{mm}$  之间时, 公差为  $\pm 0.3\text{mm}$ ; 当外形尺寸  $> 5\text{mm}$  时, 公差为  $\pm 0.4\text{mm}$ ;  
 (2) 安装孔尺寸中未注尺寸公差均为  $\pm 0.1\text{mm}$ 。

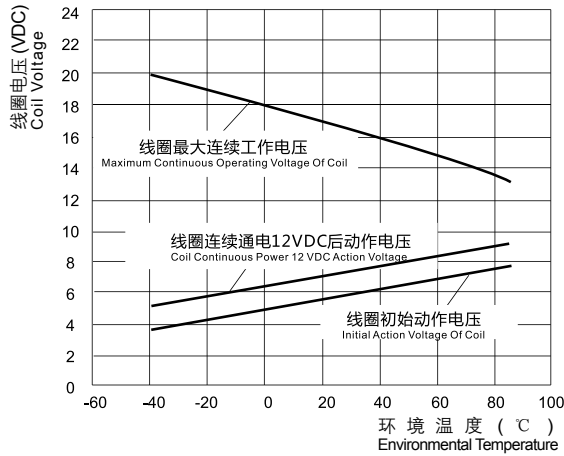
## REMARK:

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

性能曲线图 PERFORMANCE CURVE

1. 线圈连续通电电压范围  
Coil Continuous Voltage Range

178Ω 线圈连续通电电压范围  
178Ω coil Continuous Voltage Range

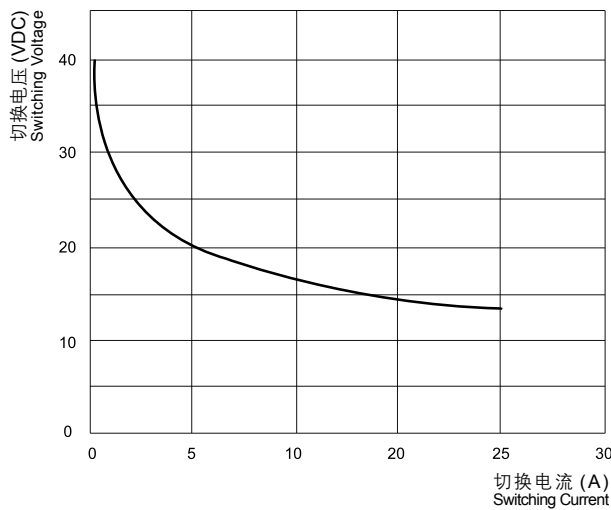


说明:

- (1) 继电器线圈施加最大连续工作电压时, 触点应没有负载。
- (2) 动作电压与线圈预通电电压有关, 预通电后检查动作电压, 其值会变大
- (3) 线圈最大允许温度为 180℃, 考虑到电阻法所测量的线圈温升是平均值, 推荐在不同使用环境、不同线圈电压、不同负载条件下测量时, 线圈温度应小于 170℃。
- (4) 当线圈实际工作电压超出曲线规定范围时, 请联系美硕并提供相应详细使用条件。

- (1) There should be no contact load applied when maximum continuous operation voltage is applied on coil.
- (2) The operating voltage is connected with coil pre-energized time and voltage. After pre-energized, the operating voltage will increase.
- (3) The maximum allowable coil temperature is 180 °C. For the coil temperature rise which is measured by resistance is average value, we recommend the coil temperature should be below 170 °C under the different application ambient, different coil voltage and different load etc.
- (4) If the actual operating coil voltage is out of the specified range please contact meishuo for further details.

2. 极限负载范围  
Limit Load Range



说明:

- (1) 本图以常开触点为例, 本图电流为阻性。
- (2) 产品按接触点参数表进行负载与耐久性试验, 当实际使用的负载电压、电流、动作频率任一项与触点参数表不同时, 请重新进行确认试验。

- (1) This chart takes NO contact. Resistive load as example.
- (2) The load and electricl endurance tests are made according to "CONTACT DATA" paremeters' table. If actual load voltage, current, or operate frequency is different from "CONTACT DATA" table, please arrange corresponding tests for confirmation.

声明 STATEMENT:

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。

客户应根据具体的使用条件选择与之相匹配的产品。如有疑问, 请与美硕联系获取更多的技术支持, 但产品选型责任由客户承担。

This product specification is for reference only to customers, subject to change without notice.

The customer should select the matching product according to the use condition. Any questions, please feel free contact us to get more technical support. However, product selection responsibility only by the customer.