



### 特性 FEATURES

- 45A 触点切换能力
  - 印制板安装
  - 具有一组常开、一组转换触点形式
  - 美式和欧式两种引出端可供选择
  - 外形尺寸: 25.7 × 20.6 × 22.3mm
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- 45A switching capability
  - PCB terminals available
  - 1 form A & 1 form C contact arrangement
  - American and european style available
  - Outline dimensions: 25.7 × 20.6 × 22.3mm

### 触点参数 CONTACT PARAMETERS

|           |                         |  |
|-----------|-------------------------|--|
| 触点形式      | Contact Arrangement     | 1A、1C  |
| 触点材料      | Contact Material        | 银合金 Silver Alloy   |
| 接触压降 (初始) | Voltage Drop(Initial)   | NO: 典型值 Typ. 20mV, 最大值 Max. 300mV (at 10A)<br>NC: 典型值 Typ. 20mV, 最大值 Max. 300mV (at 10A) |
| 最大连续电流    | Max. Continuous Current | NO: 45A<br>NC: 30A   |
| 最大切换电压    | Max. Switching Voltage  | 75VDC  |
| 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 | 500MΩ (500VDC)  |
| 介质耐压  | Dielectric Strength   | 触点与线圈间 Between Coil & Contacts: 500VAC 1min<br>断开触点间 Between Open Contacts: 500VAC 1min |
| 动作时间  | Operate Time          | ≤10ms   |
| 释放时间  | Release Time          | ≤7ms  |
| 环境温度  | Ambient Temperature   | -40℃ ~+125℃   |
| 振动    | Vibration             | 10Hz~500Hz, 49m/s <sup>2</sup> (5G)   |
| 冲击    | Shock                 | 98m/s <sup>2</sup> (10G)  |
| 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, 敞开型 Open Type, 防焊剂型 Flux Proofed  |
| 重量    | Unit Weight           | 约 Approx. : 20g   |

### 线圈规格表 COIL DATA(23℃ )

| 额定电压<br>Rated Voltage<br>VDC | 动作电压<br>Operate Voltage<br>VDC | 释放电压<br>Release Voltage<br>VDC | 线圈电阻<br>Coil Resistance<br>Ω ± 10% | 线圈功率<br>Coil Power<br>W | 允许最大线圈电压 <sup>(1)</sup><br>Max Allowable<br>Overdrive Voltage<br>VDC |      |
|------------------------------|--------------------------------|--------------------------------|------------------------------------|-------------------------|--|------|
|                              |                                |                                |                                    |                         | 20℃  | 85℃  |
| 6                            | ≤4.2                           | ≥0.6                           | 19                                 | 1.9                     | 9.0  | 6.5  |
| 12                           | ≤8.4                           | ≥1.2                           | 90                                 | 1.6                     | 19.6   | 14.3 |
| 24                           | ≤16.8                          | ≥2.4                           | 362                                | 1.6                     | 39.3   | 28.6 |
| 6                            | ≤4.2                           | ≥0.6                           | 30                                 | 1.2                     | 11.0   | 8.0  |
| 12                           | ≤8.4                           | ≥1.2                           | 120                                |                         | 22.1   | 16.0 |
| 24                           | ≤16.8                          | ≥2.4                           | 480                                |                         | 44.3   | 30.0 |

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.

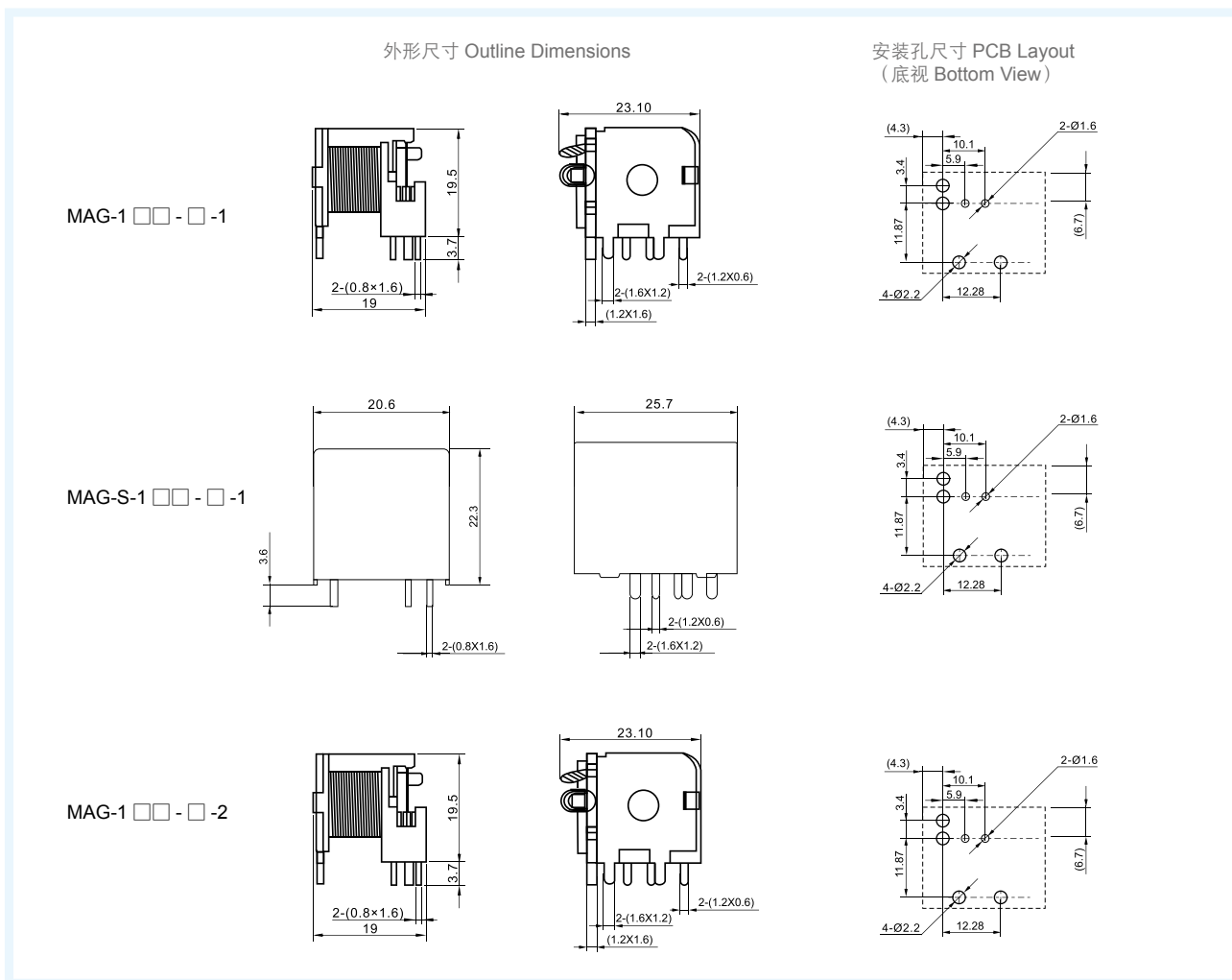
## 负载参数 LOAD DATA

| 负载电压<br>Load Voltage | 负载类型<br>Load Type |          | 触点负载电流<br>Load Current<br>A |       |       | 通断比<br>On/Off Ratio<br>s |           | 电耐久性 (次)<br>Electrical<br>Endurance<br>OPS |
|----------------------|-------------------|----------|-----------------------------|-------|-------|--------------------------|-----------|--|
|                      |                   |          | 1C                          |       | 1A    | 接通<br>On                 | 断开<br>Off |  |
|                      |                   |          | 常开 NO                       | 常闭 NC | 常开 NO |                          |           |  |
| 14VDC                | 阻性<br>Resistive   | 接通 Make  | 45                          | 30    | 45    | 1.5                      | 1.5       | 1 × 10 <sup>5</sup>                        |
|                      |                   | 断开 Break | 45                          | 30    | 45    |                          |           |  |

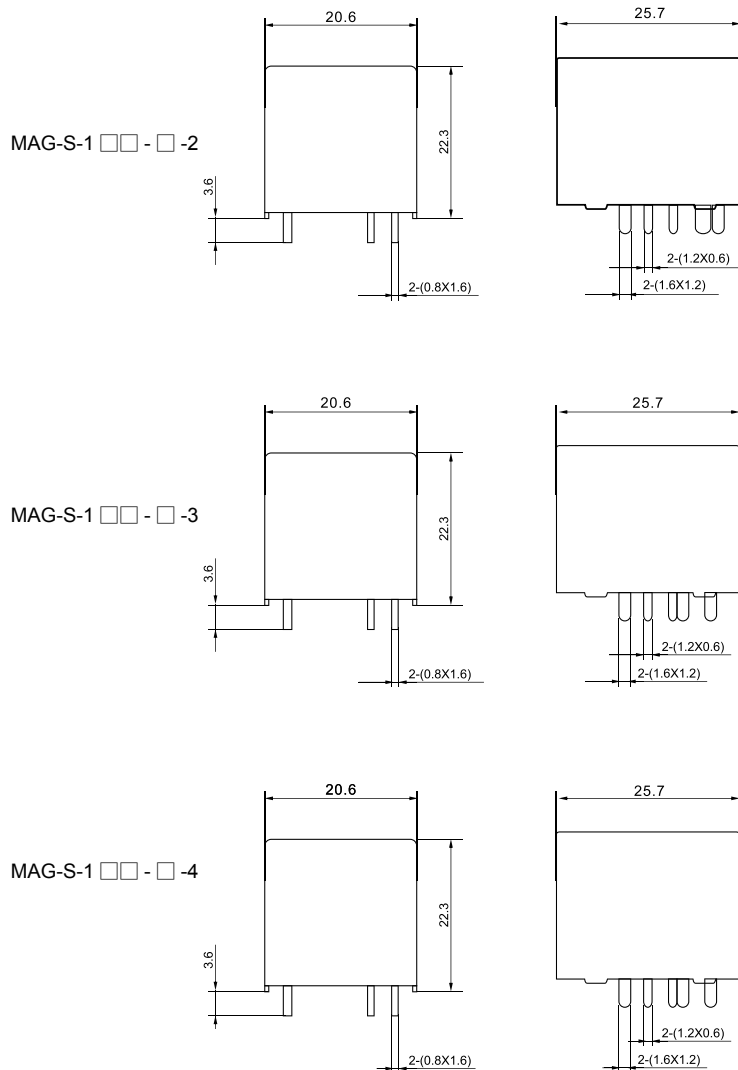
## 订货标记示例 ORDERING INFORMATION

|                     |   |    |    |    |    |    |
|---------------------|---|----|----|----|----|----|
| 产品型号 Model:         | MAG   | -S | -1 | 12 | -C | -1 |
| 产品结构 Structure:     | 无 Nil: 敞开型 Open Type  |    |    |    |    |    |
| 触点组数 Contact Group: | S: 塑封型 / 防焊剂型 Sealed/Flux Proofed                           |    |    |    |    |    |
| 线圈电压 Coil Voltage:  | 1: 1组 1 Group   |    |    |    |    |    |
| 触点形式 Contact Form:  | 06、12、24 VDC  |    |    |    |    |    |
|                     | A: 常开 NO  |    |    |    |    |    |
|                     | C: 转换 NO/NC   |    |    |    |    |    |
|                     | 1: 美式 American Type   |    |    |    |    |    |
|                     | 2: 欧式 European Type   |    |    |    |    |    |
|                     | 3: 美式塑封型, 带 3 只轭铁引出脚 USA Sealed Type, 3 Yoke Terminals      |    |    |    |    |    |
|                     | 4: 欧式塑封型, 带 3 只轭铁引出脚 European Sealed Type, 3 Yoke Terminals |    |    |    |    |    |

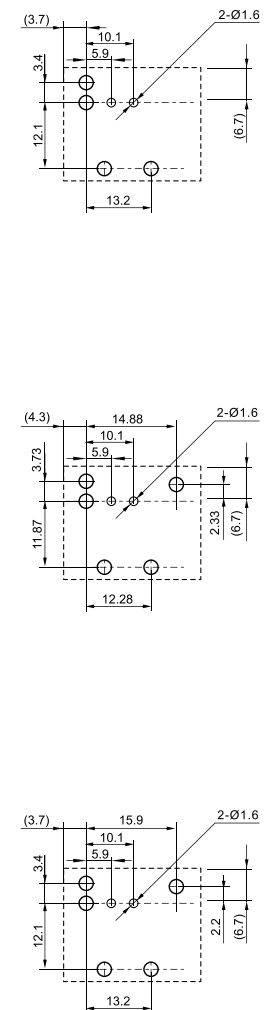
## 外形尺寸、接线图、安装孔尺寸 OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB LAYOUT (单位 Unit: mm)



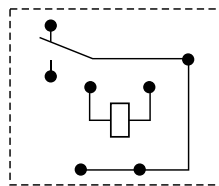
外形尺寸 Outline Dimensions



安装孔尺寸 PCB Layout  
(底视 Bottom View)



接线图 Wiring Diagram (底视 Bottom View)

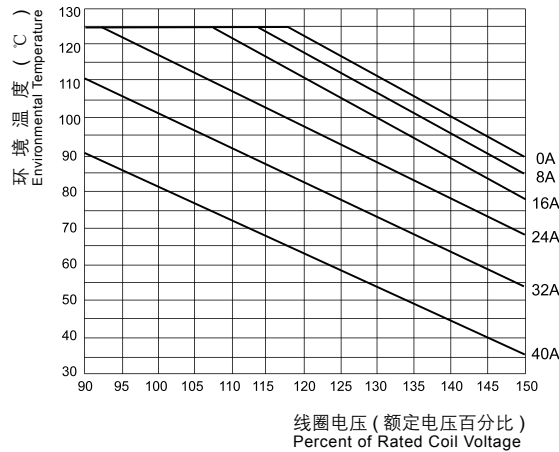


备注:

(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  $\pm 0.1\text{mm}$ 。

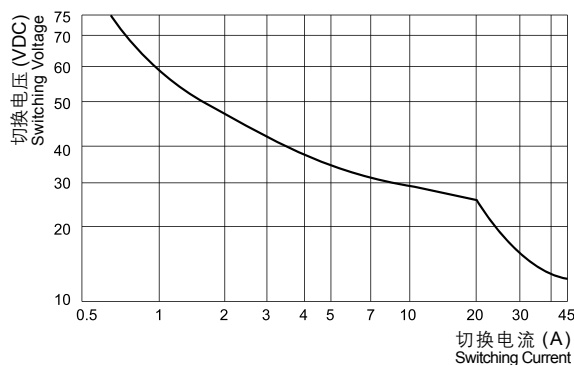
REMARK:

(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**

**说明:**

- (1) 该图以灵敏型敞开结构为例。
- (2) 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℃。
- (3) 当线圈实际工作电压超出曲线规定范围时，请联系美硕，并提供详细使用条件。

- (1) The maximum allowable coil temperature is 180℃. For the coil temperature rise which is measured by resistance is average value, we recommend the coil temperature should be below 170℃ under the different application ambient, different coil voltage and different load etc.
- (2) If the actual operating coil voltage is out of the specified range, please contact Meishuo for further details.

**2. 允许最大负载范围**  
**Maximum 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 electrical endurance tests are made according to "CONTACT DATA" parameters 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.