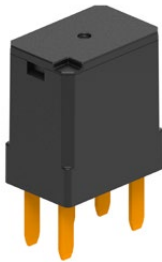


汽车应用
Automotive Applications

- 工作温度高达 125°C
- 防尘罩和塑封型可供选择
- 可带瞬态抑制电阻
- 外形尺寸 L×W×H: 22.5×15×25mm
- Ambient temp can reach 125°C
- Dust protected type And sealed type available
- With transient suppression resistor
- Profile Dimension L×W×H: 22.5×15×25mm



MAS - S - 1 12 - A - R

产品型号 Model	产品结构 Structure	触点组数 Number of Poles	线圈电压 Coil Voltage	触点形式 Contact Form	线圈并联元件 Parallel Coil Components
	S: 塑封型 无: 防尘罩型 S: Wash tight Nil: Dust Protected	1: 1 组 1 Pole	12: 12VDC 24: 24VDC	A: 常开 NO C: 转换 NO/NC	R: 并联电阻 With Resistor D1: 并联二极管 (阳极接 #86) With Parallel Diode(Anode on 86) D2: 并联二极管 (阳极接 #85) 无: 不带并联元件 With Parallel Diode(Anode on 85) None: Without parallel elements

触点参数 CONTACT PARAMETERS

触点形式 Contact Form	1a, 1c
触点材料 Contact Material	银合金 Silver Alloy
接触压降 Voltage Drop(初始 Initial)	NO: 典型值 Typ.20mV, 最大值 Max.250mV
最大连续电流 Max.Continuous Current	NO/NC:30A/20A
电气寿命 Electrical Life	见附表 1 See attached list 1
机械寿命 Mechanical Life	1×10 ⁶ 次 OPS

性能参数 CHARACTERISTICS

绝缘电阻 Insulation Resistance	100MΩ(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°C ~+125°C
振 动 Vibration	10Hz~1000Hz, 19.8m/s ²
冲 击 Shock	1000m/s ²
引出端形式 Termination	快速接式引出端 QC
封装形式 Construction	防尘罩型 Dust Protected, 塑封型 Wash tight
重 量 nit Weight	约 Approx.20g
机械性能 Mechanical Data	外壳保持力 :(拉和压)200N Cover Retention:(Pull , Push)200N 引出脚保持力 :(拉和压)100N Terminal Retention:(Pull , Push)100N 引出脚抗弯曲力 :(各方向)10N Terminal Resistance To Bending:(Front , Side)10N

线圈规格表 COIL DATA(23℃)

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 Ω±10%	线圈功率 Coil Power W	并联电阻 Parallel Resistance Ω±10%	等效电阻 Equivalent Resistance Ω±10%	允许最大线圈电压 (1) Max.Allowable Overdrive Voltage VDC	
							20℃	85℃
12	≤ 8.4	≥ 1.2	109	约 Approx.1.3	-	-	20.4	14.9
12	≤ 8.4	≥ 1.2	109	约 Approx.1.5	680	93.9	20.4	14.9
24	≤ 16.8	≥ 2.4	360	约 Approx.1.6	-	-	36	28
24	≤ 16.8	≥ 2.4	360	约 Approx.1.8	2700	317.6	36	28

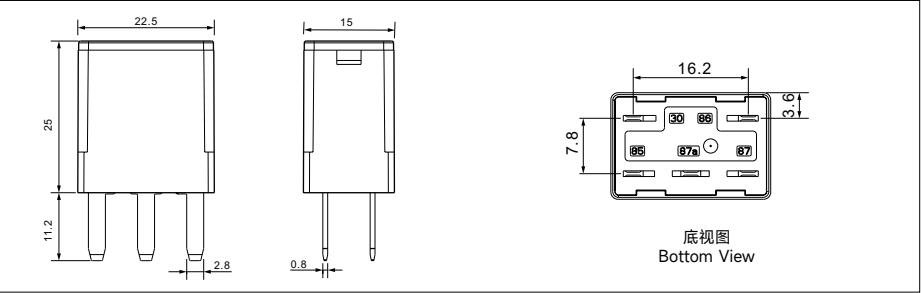
注意：(1) 触点无负载电流，线圈电阻为最小值情况下，继电器线圈允许施加的最大连续工作电压。
Be careful:(1)Max.Allowable overdrive voltage is stated with no load applied minimum coil resistance.

附表 1 ATTACHED LIST 1

负载电压 Load Voltage	负载类型 Load Type		负载电流 A Load Current			通断比 s On/Off Ratio		电耐久性 (次 OPS) Electrical Endurance	试验环境 温度 Ambient Temp.
			1C		1A	接通 On	断开 Off		
			常开 NO	常闭 NC	常开 NO				
14VDC	阻性 Resistive	接通 Make	30	20	30	2	2	1×10 ⁵	详见电耐久 性实验环境 温度曲线 See Ambient Temp.Curve
		断开 Break	30	20	30	2	2		
	感性 Inductive	接通 Make	40	20	40	2	2		
		断开 Break	20	10	20	2	2		
	灯 Lamp	接通 Make	100	-	100	2	2		
		断开 Break	20	-	20	2	2		
28VDC	阻性 Resistive	接通 Make	20	10	20	2	2		
		断开 Break	20	10	20	2	2		

外形尺寸 PROFILE DIMENSION

单位 Unit: mm

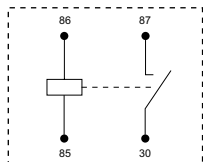


备注：(1) 产品部分外形尺寸未注尺寸公差，当外形尺寸≤1mm，公差为 ±0.2mm；
当外形尺寸在 1-5mm 之间时，公差为 ±0.3mm；当外形尺寸 > 5mm 时，公差为 ±0.4mm；
(2) 安装孔尺寸中未注尺寸公差均为 ±0.1mm。

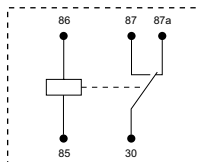
REMARK:
(1) In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension > 1mm and ≤ 5mm, tolerance should be ±0.3mm; outline dimension > 5mm, tolerance should be ±0.4mm;
(2) The tolerance without indicating for PCB layout is always ±0.1mm.

接线图 (底视图) WIRING DIAGRAM (BOTTOM VIEW)

MAS-□-1□□-□

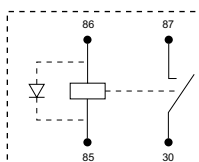


1A

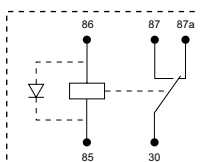


1C

MAS-□-1□□-□-D1

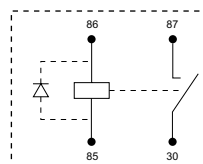


1A

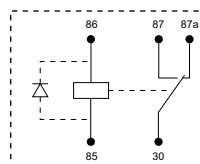


1C

MAS-□-1□□-□-D2

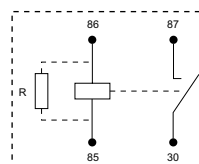


1A

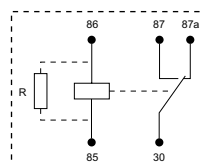


1C

MAS-□-1□□-□-R



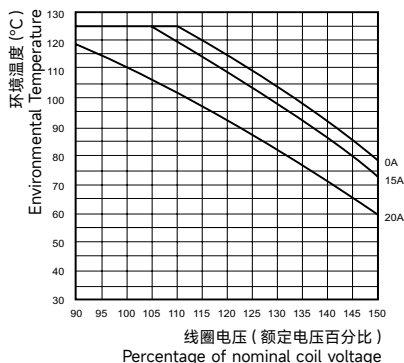
1A



1C

性能曲线图 PERFORMANCE CURVE

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

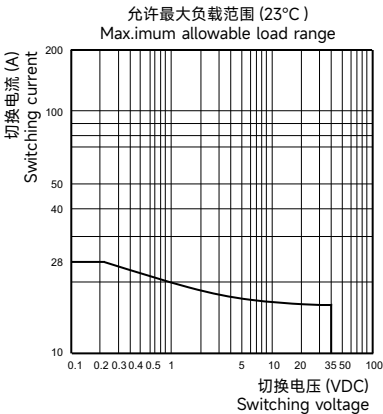


说明:

- (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) 线圈最大允许温度为 180°C, 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°C。
- (3) 当线圈实际工作电压超出曲线规定范围时, 请联系美硕并提供相应详细使用条件。

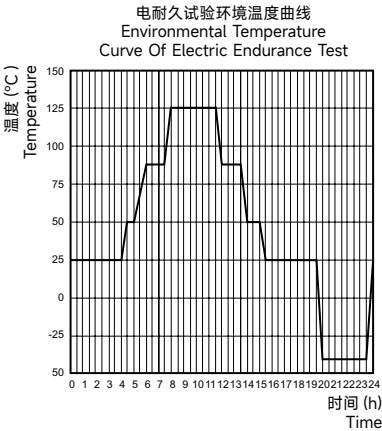
- (1) When the relay applies the Maximum continuous voltage, the contact shall be not Load
- (2) The Maximum allowable temperature of the coil is 180 degrees. Considering the temperature rise of the coil measured by the resistance method, it is recommended that the coil temperature should be less than 170 degrees under different environmental conditions, different coil voltages and different load conditions
- (3) When the actual working voltage of the coil exceeds the specified range of the curve, please contact the master and provide the appropriate conditions for use

性能曲线图 PERFORMANCE CURVE



说明：
产品按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。

Load and durability test shall be carried out according to the contact parameter list. When the actual load voltage, current and action frequency are not the same as the contact parameters, please confirm the test again.



说明：
(1) 最低温度为 -40°C
(2) 最高温度为 125°C
(1) The minimum temperature is -40°C.
(2) The Maximum temperature is 125°C

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



浙江美硕电气科技股份有限公司
ZHEJIANG MEISHUO ELECTRIC TECHNOLOGY CO.,LTD.

地址：浙江省乐清市经济开发区纬十二路 158 号

电话：+86-0577-62518886 62518811

传真：+86-0577-62518821

Http://www.msrelay.com www.msrelay.cn

E-mail: sales@msrelay.com

Add.: No. 158, Wei 12 Road, Yueqing Economic

Development Zone, Yueqing City, Zhejiang, China

Tel: +86-0577-62518811, 62518886

Fax: +86-0577-62518821

Http://www.msrelay.com

E-mail: sales@msrelay.com



扫一扫 关注公众号
Follow us

© 版权所有浙江美硕电气科技股份有限公司，保留所有权利。
Copyright Zhejiang Meishuo Electric Technology Co., Ltd. All rights reserved.

环保纸印刷
Eco paper printing

2025.11.11

2025