

- 40A 触点切换能力
- 环境温度高达 125℃
- 可靠性高
- 抗冲击抗振动能力高
- 外形尺寸 L × W × H: 18.3 × 16 × 15.9mm
- 40A Switching capability
- Ambient temp. can up to 125 C
- With Highly established reliability
- Strong resistance ability to shock & vibration
- Outline dimensions L × W × H: 18.3 × 16 × 15.9mm

	MALA	-	S	-	1	-	12	-	A	-	X
产品型号 Model	产品结构 Structure	触点组数 Contact Group	线圈电压 Coil Voltage	触点形式 Contact Form	特殊性 Special Characteristic						
	S: 塑封型 S: Sealed	1: 1 组 1: 1 Group	12: 12V	A: 常开 A:NO	1: 普通型 X: 客户特殊要求 1: Ordinary Type X: Customer Special Requirements						

触点参数 Contact Parameters

触点形式 Contact Arrangement	1A
触点材料 Contact Material	银合金 Silver Alloy
接触压降 Voltage Drop(初始 Initial)	典型值 Typ. 30mV, 最大值 Max. 300mV(at 10A)
额定负载 Rated Load	40A 14VDC
最大连续电流 Maximum continuous current	40A
最大切换电压 Max. Switching Voltage	14VDC
最大切换功率 Max.Switching Power	560W
电气寿命 Electrical Life	1×10^5 次 OPS
机械寿命 Mechanical Life	1×10^6 次 OPS

性能参数 Characteristics

绝缘电阻 Insulation Resistance	1000M Ω Min.(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 Set Time	≤ 10 ms
复归时间 Release Time	≤ 5 ms
环境温度 Ambient Temperature	-40℃ ~+125℃
振动 Vibration	10Hz~440Hz, 196m/s ²
冲击 Shock	294m/s ² , 常开触点的闭合时间 < 100 μ s(Close Time Of NO Contacts 100 μ s Max.) 980m/s ² , 闭合触点的闭合时间 < 100 μ s(Release Time Of Closed NO Contacts 100 μ s Max.)
引出端方式 Termination	印刷电路板引出端 PCB
封装方式 Construction	塑封型 Sealed
重量 Unit Weight	约 Approx. 11g

线圈规格表 Coil Data(23℃)

额定电压 Rated Voltage VDC	动作电压 *1 Set Voltage VDC	复归电压 *1 Reset Voltage VDC	吸合线圈电阻 Set Coil Resistance $\Omega \pm 10\%$	复归线圈电阻 Reset Coil Resistance $\Omega \pm 10\%$	线圈功率 Coil Power W	允许最大线圈电压 *2 Max Allowable Overdrive Voltage VDC
12	≤8.4	≤6.9	20	19	约 Approx. 7.2	18

注意：*1 脉冲宽度应在 10ms 到 100ms 之间，激励电压模式应采用下图的方式。

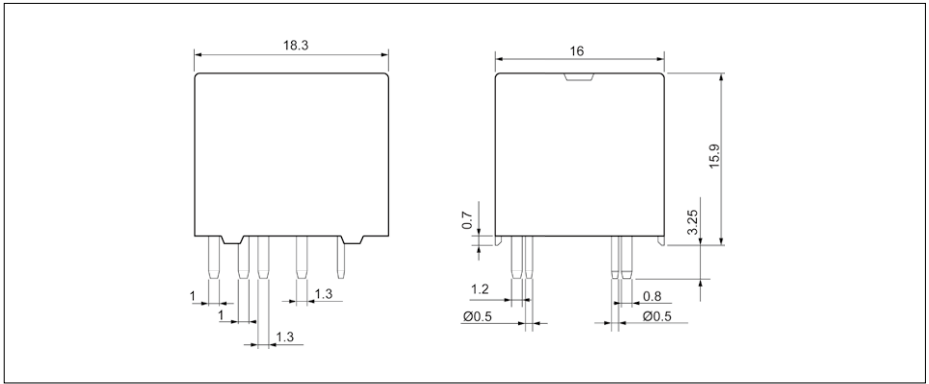
*1 Pulse width should be between 10ms to 100ms, the excitation voltage mode should be used in the following way.

*2 允许最大线圈电压是标识无负载和最小线圈电阻下的电压，最大允许通电时间为 1 秒。

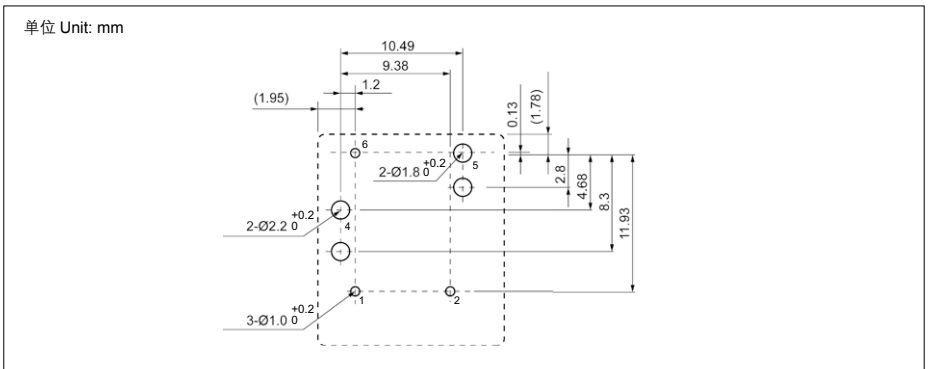
*2 Max. Allowable overdrive voltage is stated with no load applied minimum coil resistance. Max. Allowable infiction time is 1s

外形尺寸 Outline Dimensions

单位 Unit: mm



安装孔尺寸 PCB Layout(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 ≤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；

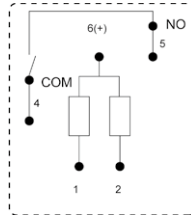
(2) 安装孔尺寸中未注尺寸公差的均为 ±0.1mm。

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.

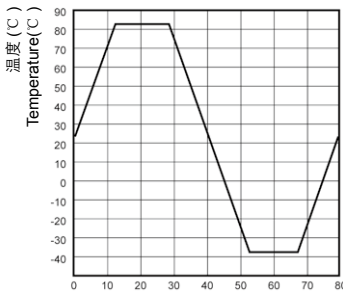
接线图 Wiring Diagram



动作 / 复归的极性 Polarity for set/reset	动作 Set	复归 Reset
激励 Energization	脚 1(-), 脚 6(+) Pin1(-), pin6(+)	脚 2(-), 脚 6(+) Pin2(-), pin6(+)

性能曲线图 Performance Curve

温度曲线 (1 个循环) Ambient Temp. Curve(One Cycle)



说明 Explain:

- (1) 最低温度为 -40°C
- (1) 最高温度为 85°C
- (1) The minimum temperature is -40°C
- (1) The maximum temperature is 85°C

注意事项:

- 1, 磁保持继电器出厂状态为动作或复归状态, 但因运输或继电器安装时受到冲击等因素的影响, 可能会改变状态, 因而使用时 (电源接入时) 请根据需要重新将其设置为复归状态或动作状态;
- 2, 为了确保磁保持继电器动作或复归, 施加到线圈上的激励电压须达到额定电压, 脉冲宽度须大于动作或复归时间的 5 倍; 不要同时向动作线圈和复归线圈施加电压; 不要长时间 (大于 1 分钟) 向线圈施加电压;
- 3, 不带软铜绞线的磁保持继电器负载引出脚不能焊接, 不能随意扳动。
- 4, 继电器通常为防尘罩结构, 外接件按照客户特殊要求定制, 所以推荐此产品的储存时间小于 6 个月, 并注意仓储环境; 同时为保证产品接触可靠性, 在客户没有特别申明的情况下, 我司将控制继电器触点为闭合状态。

NOTICE

1. Relay is on the "reset" or "set" status when being released from stock, with the consideration of shock risen from transit and relay mounting, relay would be changed to "reset" or "set" status, therefore, when application(connecting the power supply), please reset the relay to "reset" or "set" status on request.
2. In order to maintain "reset" or "set" status, energized voltage to coil should reach the rated voltage, impulse width should be 5 times more than "reset" or "set" time. Do not energize voltage to "reset" coil and "set" coil simultaneously. And also long energized time (more than 1min) should be avoided.
3. The terminals of relay without twisted copper wire can not be tin-soldered, can not be moved willfully, more over two terminals can't be fixed at the same time.
4. Relays used for metering measuring applications are usually made with dust proof structure, while most relays could be made specially per customer's specific requirements. No longer than 6 months' storage time is recommended for this kind of relay, and please pay attention to the storage environment. To ensure contact reliability, we will keep contact status be closed when delivery if no special required by customer.