

汽车继电器

Automotive Relay

20A/35A

特性 / FEATURES

- 35A触点切换能力
35A switching capability
- 工作温度高达125°C
Extended temp. range upto 125°C
- 防尘型和密封型
Dustproof type and sealed type



RoHS
Compliant

订购信息 / ORDERING INFORMATION

SLM-12-S-1-R-C

	A/B/C	触点形式 Contact Arrangment
	R:电阻/Resistor D:二极管/Diode 无: 无并联元件/Without: without parallel components	线圈并联元件 Parallel Coil Components
1.PCB 端子/PCB terminal 2.无: 快连接端子/Without: QC terminal		结构形式 Version
S:密封/Sealed 无:防尘/Dustproof		封装形式 Construction
12VDC/24VDC		线圈电压 Coil Voltage
		型号 Model

触点参数 / CONTACT PARAMETERS

触点形式	Contact arrangement	A/B/C
接触压降(10A下测量)	Voltage drop (at 10A)	≤200mV
触点材质	Contact material	银合金/Silver alloy: AgSnO ₂ In ₂ O ₃ 、AgSnO ₂ 、AgNi
触点负载	Contact rating	20A/35A 14VDC
最大切换电压	Max switching voltage	50VDC
最大切换电流	Max switching current	35A (阻性/Resistive 14VDC)
最小负载	Min contact load	1A 6VDC
电耐久性 (频率:每小时900次)	Electrical endurance (Frequency:900 ops/h)	1x10 ⁵ ops
机械耐久性 (频率:每小时18000次)	Mechanical endurance (Frequency:18000 ops/h)	1x10 ⁷ ops

特性参数 / CHARACTERISTICS PARAMETERS

绝缘等级	Insulation level	Class B / Class F
绝缘电阻	Insulation resistance	100MΩ (500VDC)
介质耐压 (漏电流 1mA)	Dielectric strength (Leakage current 1mA)	线圈与触点间耐压 Dielectric strength (Between coil and contacts)
		断开触点间耐压 Dielectric strength (Between open contacts)
吸合时间(额定电压下)	Operate time(at nominal voltage)	≤10ms
释放时间(额定电压下)	Release time (without diode)(at nominal voltage)	≤10ms
湿度	Humidity	85% RH(23°C)
环境温度	Ambient temperature	-40°C ~ +125°C
抗振动	Vibration resistance	10Hz~60Hz 0.35mm 双振幅/Double amplitude 60Hz~500Hz 49m/s ²
抗冲击	Shock resistance	196m/s ²
重量	Weight	约/Aprox 20g
封装形式	Construction	防尘型/Dustproof type 密封型/Sealed type

备注: 以上数据均为初始值

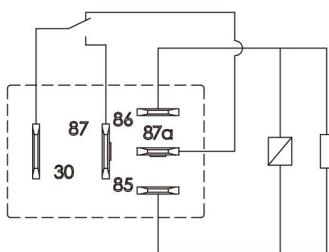
Remark: All above data is initial value

线圈参数 / COIL PARAMETERS

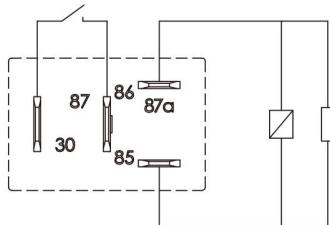
常温/At 23°C

功耗(W)	Power consumption(W)	1.5W	1.7W	1.5W	1.7W
额定电压(VDC)	Nominal voltage(VDC)	12	12	24	24
线圈电阻(Ω±10%)	Coil resistance(Ω±10%)	96	96	384	384
并联电阻(Ω)	Parallel resistance(Ω)		680		2700
吸合电压(Max)	Pick-up voltage(Max)			65%额定电压(Nominal voltage)	
释放电压(Min)	Drop-out voltage(Min)			10%额定电压(Nominal voltage)	
允许最大电压(VDC)	Max allowable overdrive voltage(VDC)			150%额定电压(Nominal voltage)	

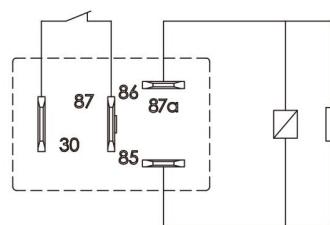
线路图(底视图) / WIRING DIAGRAM (BOTTOM VIEW)



转换C型/Conversion C type



常开A型/Normally open A type



常闭B型/Normally closed B type

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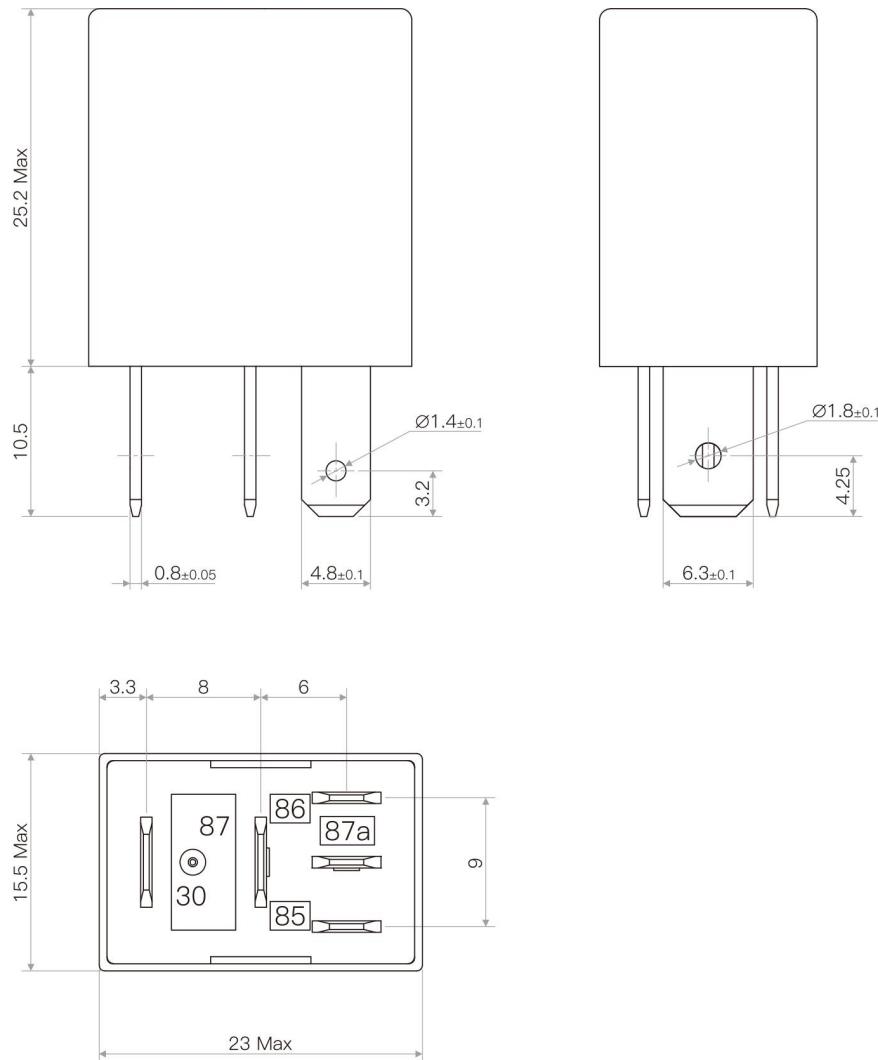
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外形图 / OUTLINE DIMENSIONS

单位/Unit(mm)

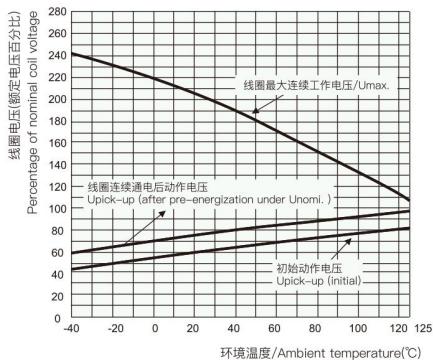
SLM-12(24)-(S)-R-C(A/B)



底视图/Bottom view

未注公差/Tolerance: ± 0.3 端子垂直度/Terminal vertical deviation tolerance:0.3mm

性能曲线图 / CHARACTERISTIC CURVES



线圈连续通电电压范围
Coil operating voltage range

- (1) 动作电压与线圈预通电时间、预通电电压有关，在预通电后检测动作电压，其值会变大。
- (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，请联系松乐并提供详细使用条件。

- (1) The operating voltage is connected with coil energized time and voltage. After energized, the operating voltage will increase.
- (2) The maximum allowable coil temperature is 180°C. Considering 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.
- (3) If the actual operating coil voltage is out of the specified range, please contact Songle for further details.



电耐久性试验环境温度曲线
Ambient temperature curve of the electrical endurance test

- (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.