

Automotive Relay

SARS

Features

- 35A switching capability.
- NO type and CO type are avaliable.
- Satisfy RoHS and ELV

Typical Applications

- Heater, fan control, fuel pump control, wiper control, headlight control.
- Car air conditioner, electromagnet control, lighting control, interlocks office equipment, etc.

Contact Capacity

Max. continuous current (1)	35A
Max. switching current	connect (NO):150A ⁽²⁾ , disconnect(NO):35A
Max. switching voltage	see performance curve

Contact Data

			Contact Current(A)		duty factor				
Contact	Load Type		1C、1A		ON	OFF	endurance	contact	test ambient
Voltage			NO	NC	S	S	(cycles)	material	temperature
14VDC	resistive	on	35	20	2	2	1×10 ⁵	AgSnO ₂	23℃
		off	35	20					
	lamp load	on	150		2	2	1×10 ⁵	AgSnO ₂	
		off	30						
	general	on	80		2	2	1×10⁵	AgSnO ₂	
		off	30						
14VDC	resistive	on	20	10	2	2	1×10 ⁵	AgSnO ₂	23℃
		off	20	10					
	lamp load	on	70		2	2	1×10 ⁵	AgSnO ₂	
		off	7						
	general	on	38	28	2	2	1×10 ⁵	AgSnO ₂	
		off	15	6					

Characteristic Data

Contact material	Silver alloy					
contact voltage drop	200mV Max(at 10A)					
Operate time	10msec.Max.					
Release time (3)	10 msec.Max					
Initial insulation resistance	100MΩ Min.(500VDC)					
Initial dielectric strength (4)	Between open contacts: 500VAC , 50/60Hz 1min.					
illitiat dietectric strengtii	Between coil and contact: 500VAC, 50/60Hz 1min.					
Shock resistance	NO 20G/NC 5G					
(5)	10~25Hz 1.27mm double-amplitude					
Vibration resistance ⁽⁵⁾	20~500Hz,98m/s²					
Endurance	Mechanical (at 10,800 ops./h)	1×10 ⁷ ops				
Lituatance	Electrica(900 ops./h)	see contact parameter table				
Ambient temperature	-40°C ~ +125°C (no condensation)					
weight	Approx.19.4 g					

Note:(1) For the normally open contact, the measurement of the 100% rated voltage is applied to the coil;

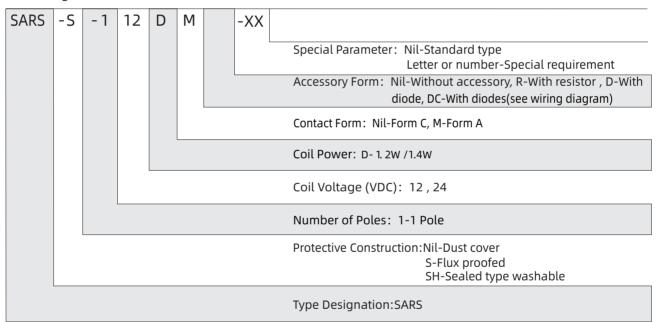
- (2) surge current in lamp load, 14VDC;
- (3) Rated voltage step up to OVDC, And measurement without coil suppression circuit;
- (4) The leakage current is less than 1mA;(5) When the excitation is excited, the opening time of the normally open contact is less than 1ms; when no excitation, the normally closed contact time is less than 1ms, at the same time, the normally open contact can not be closed.

Coil Data (at 20°C)

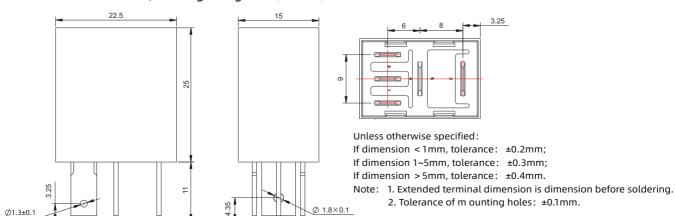
Nominal voltage	Nominal operating current	Coil resistance	Parallel resistance	Equivalent resistance	Max. Allowable voltage	Operate voltage	Release voltage	Nominal operating power
(VDC)	±10%(mA)	±10%(Ω)	(Ω)	(Ω)	(VDC)	Max.(VDC)	Min.(VDC)	(W)
12	100	120			15.6		ominal nominal	1.2
24	50	480			31.2	60%		1.2
12	100	120	680	105.4	15.6	nominal voltage		1.4
24	50	480	2700	407.5	31.2			1.4
12	100	120			15.6			1.2
24	50	480			31.2	60%		1.2
12	100	120	680	105.4	15.6	nominal voltage		1.4
24	50	480	2700	407.5	31.2	_		1.4

Ordering Information

4.8±0.1

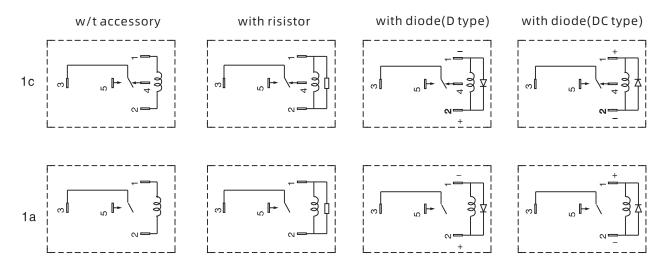


Outline Dimensions, Wiring Diagram (unit: mm)



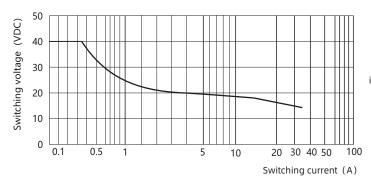
6.3±0.1

Wiring Diagram (bottom view)



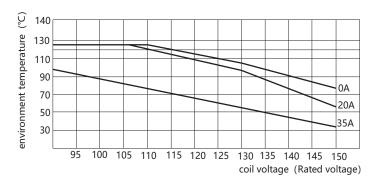
Characteristic Curves

1、Max. Allowable load range



instruction: This figure is a case study of the NO open side

2.coil continuous voltage range



instruction: when the relay coil is applied to the maximum continuous operating voltage, the contact should not be loaded

Statement:

This product specification is for reference only, subject to change without prior notice. We could not evaluate all test conditions for every possible application, thus customers should be in a right position to choose suitable products for their own application. If in doubt, please contact Sanyou for more technical support. However, it's the customer's responsibility to determine which product should be used.