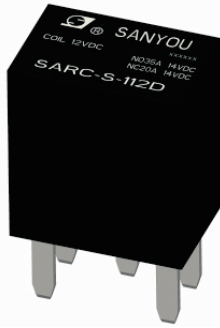


## Automotive Relay

## SARC



## Features

- 35A switching capability.
- NO type and CO type are available.
- 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 <sup>(1)</sup>	35A
Max. switching current	connect (NO):150A <sup>(2)</sup> , disconnect(NO):35A
Max. switching voltage	see performance curve

## Contact Data

Contact Voltage	Load Type		Contact Current(A)		duty factor		endurance (cycles)	contact material	test ambient temperature
			1C、1A		ON s	OFF s			
			NO	NC					
14VDC	resistive	on	35	20	2	2	1×10 <sup>5</sup>	AgSnO <sub>2</sub>	23°C
		off	35	20					
	lamp load	on	150	—	2	2	1×10 <sup>5</sup>	AgSnO <sub>2</sub>	
		off	30	—					
	general	on	80	—	2	2	1×10 <sup>5</sup>	AgSnO <sub>2</sub>	
		off	30	—					

Note: If the load condition is not in the table. Please contact SANYOU with load details to get more support.

## Characteristic Data

Contact material	Silver alloy	
contact voltage drop	200mV Max (at 10A)	
Operate time	10msec.Max.	
Release time <sup>(3)</sup>	10 msec.Max	
Initial insulation resistance	100MΩ Min.(500VDC)	
Initial dielectric strength <sup>(4)</sup>	Between open contacts:	500VAC, 50/60Hz 1min.
	Between coil and contact:	500VAC, 50/60Hz 1min.
Shock resistance	NO 20G/NC 5G	
Vibration resistance <sup>(5)</sup>	10~25Hz 1.27mm double-amplitude	
	20~500Hz,98m/s <sup>2</sup>	
Endurance	Mechanical (at 10,800 ops./h)	1×10 <sup>7</sup> ops
	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 0VDC, 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.

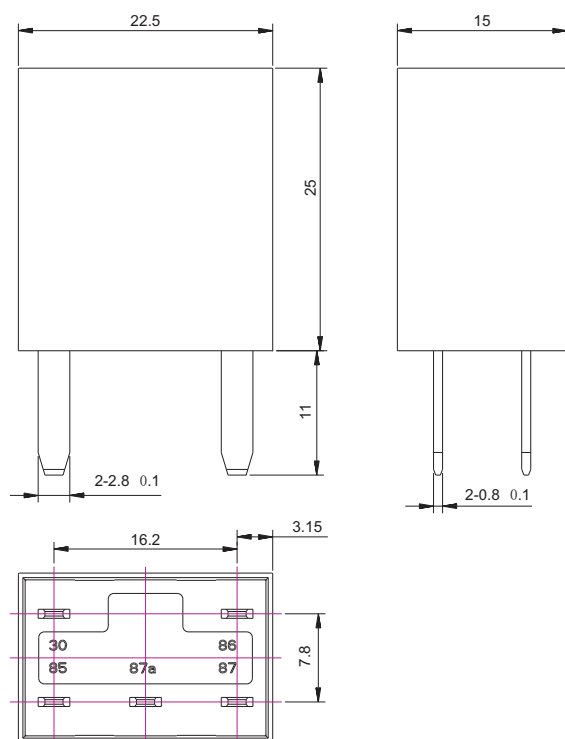
## Coil Data (at 20°C)

Nominal voltage (VDC)	Nominal operating current ±10%(mA)	Coil resistance ±10%(Ω)	Parallel resistance (Ω)	Equivalent resistance (Ω)	Max. Allowable voltage (VDC)	Operate voltage Max.(VDC)	Release voltage Min.(VDC)	Nominal operating power (W)
12	100	120	---	---	15.6	60% nominal voltage	10% nominal voltage	1.2
24	50	480	---	---	31.2			1.2
12	100	120	680	102	15.6			1.4
24	50	480	2700	407.5	31.2			1.4

## Ordering Information

<b>SARC</b>	<b>-S</b>	<b>-1</b>	<b>12</b>	<b>D</b>	<b>M</b>	<b>-XX</b>	
							Special Parameter: Nil-Standard type Letter or number-Special requirement
							Accessory Form: Nil-Without accessory, R-With resistor, D-With diode, DC-With diodes(see wiring diagram)
							Contact Form: Nil-Form C, M-Form A
							Coil Power: D- 1.2W /1.4W
							Coil Voltage (VDC): 12, 24
							Number of Poles: 1-1 Pole
							Protective Construction: Nil-Dust cover S-Flux proofed SH-Sealed type washable
							Type Designation: SARC

## Outline Dimensions, Wiring Diagram (unit: mm)



Unless otherwise specified:

If dimension < 1mm, tolerance: ±0.2mm;

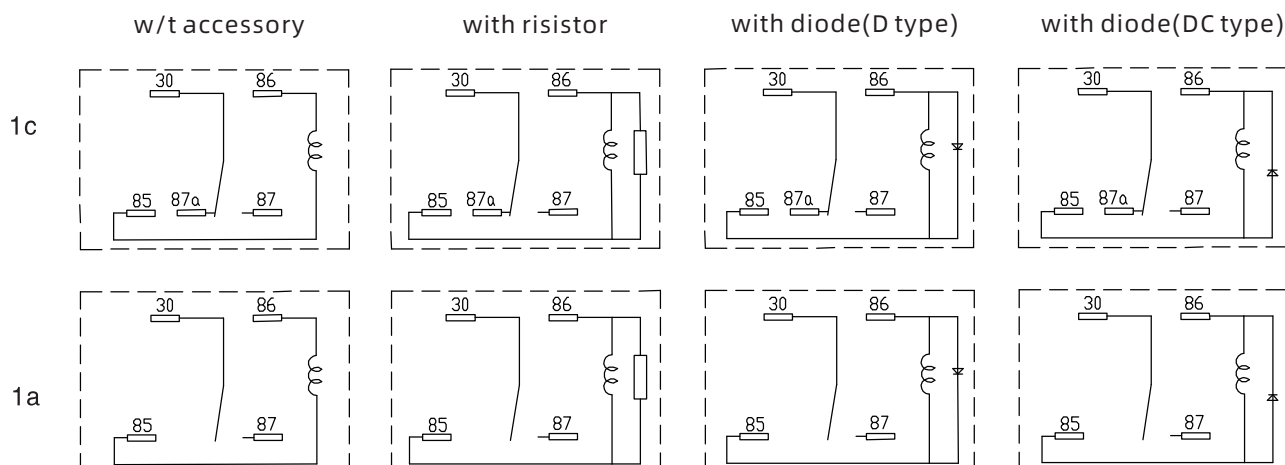
If dimension 1~5mm, tolerance: ±0.3mm;

If dimension > 5mm, tolerance: ±0.4mm.

Note: 1. Extended terminal dimension is dimension before soldering.

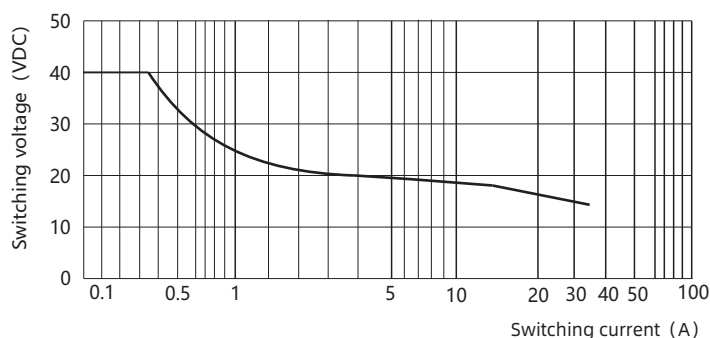
2. Tolerance of mounting holes: ±0.1mm.

### Wiring Diagram (bottom view)



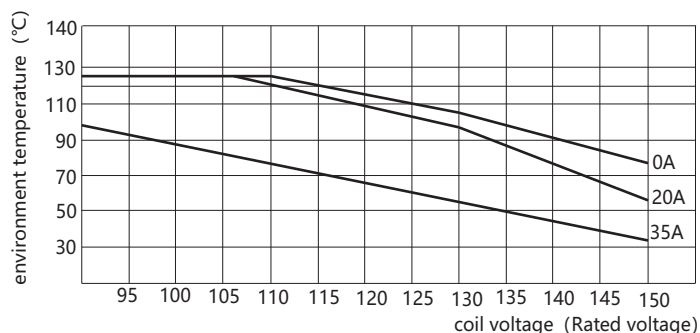
### Characteristic Curves

#### 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.