

## Features

- Microminiature high power automotive relay.
- Max. switching current : 30A.
- Sealed type available.
- Both single and dual relays available.
- Patent number : ZL 2008 20050973.6  
ZL 2008 20050974.0

## Contact Capacity

Model	SARK
Nominal switching capacity (res. load)	NO/NC : 25A /20A 14VDC
Max. switching current	30A
Max. switching voltage	30VDC
Max. switching power	420W

Contact rating voltage	Rating type		contact rating current(A)		duty factor		endurance (cycles)	contact material	test ambient temperature
			NO	NC	on S	off S			
14VDC	resistance	on	20	—	1	5	3X10 <sup>5</sup>	AgSnO <sub>2</sub>	23°C
		off	20	—					
	wiper motor L=1.0mH	on	25	—	0.2	2	3X10 <sup>5</sup>	AgSnO <sub>2</sub>	
		off	5	—					
	motor locking L=0.77mH	on	20	—	0.2	2	1X10 <sup>5</sup>	AgSnO <sub>2</sub>	
		off	20	—					
	lamp	on	40	—	2	2	1X10 <sup>5</sup>	AgSnO <sub>2</sub>	
		off	10	—					
	flashlight	on	3X21W	—	0.365	0.365	1X10 <sup>6</sup>	AgSnO <sub>2</sub>	
		off							

notes: When your rating is inconsistent with us, please tell SANYOU about your operating conditions for more support.

## Characteristic Data

Contact material	Silver alloy	
Dropping Voltage of Contacts	200mv/at 10A (max)	
Operate time (at nominal volt.)	4msec. Max.	
Release time (at nominal volt.)	4msec. Max.	
Initial insulation resistance	100MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts : AC500V ,50/60Hz 1min.	
	Between coil and contact : AC500V ,50/60Hz 1min.	
Vibration resistance	10Hz~500Hz 58.8m/s <sup>2</sup>	
Shock resistance	NO 30G / NC 5G	
Endurance (operations)	Mechanical(at 10,800ops./h)	1X10 <sup>7</sup> cycles
	Electrical	See the contact parameters
Ambient temperature	-40°C~ +105°C (No condensation)	
Unit weight	Approx.4.0g (single relay); Approx.8.0g (dual realy)	

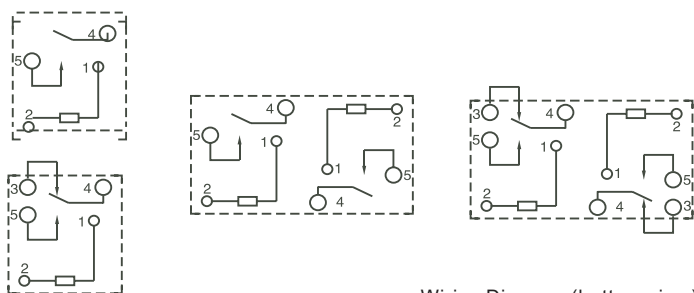
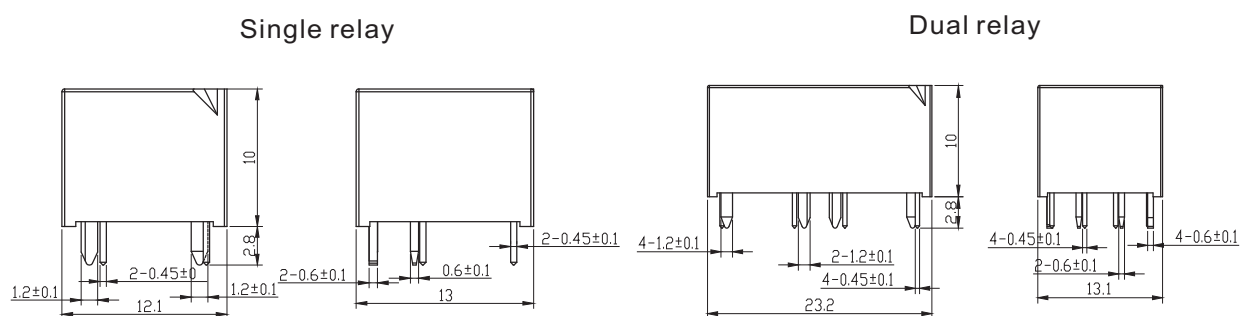
Coil Data (at 20°C )

Nominal voltage (VDC)	Nominal operating current ±10% (mA)	Coil resistance ±10% (Ω)	Max. Allowable voltage		Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
			23°C	85°C			
5	110	45	11	65	2.9	0.6	Approx. 0.55W
6	95.24	63	13.2	7.8	3.5	0.8	
9	61.11	147	19.8	12	5.2	1.1	
12	47.24	254	26	16	6.9	1.5	
24	23.62	1,016	53	31	15.6	3.0	Approx. 0.80W
12	66.30	181	22	13	6.9	1.5	

Ordering Information

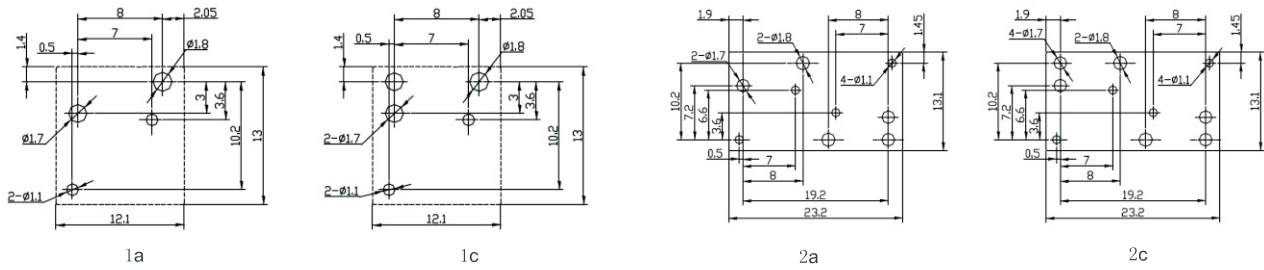
Nomenclature	
SARK-S-112D-M-XX	
	Special Parameter : Nil-Standard type, Letter or number-Special requirement
	Contact Form : Nil-Form C, M-Form A
	Coil Power : D-0.55W, H-0.8W
	Coil Voltage (VDC) : 05, 06, 09, 12, 24
	Number of Poles : 1-Single relay, 2-Dual relays
	Protective Construction : S-Flux proofed, SH-Sealed type washable
	Type Designation : SARK

Outline Dimensions, Wiring Diagram, P.C. Board Layout (unit:mm)



Wiring Diagram (bottom view)

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 P.C.B. layout : ±0.1mm.

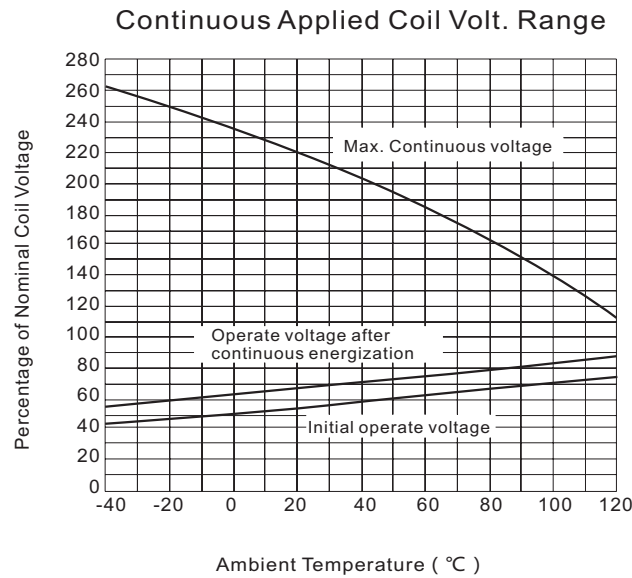


P.C.B. Layout (bottom view)

## Typical Applications

- Control box, central door lock, instrument control, engine control, power door & window, wiper control, anti-theft system, lighting and flashlight control, etc.

## Characteristic Curves



**Disclaimer:**

This datasheet is the customers' reference. All the specification are subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should in a right position to choose the suitable product for their own application. If there is any query, please contact Sanyou for the technical service. However it is the user's responsibility to determine which product should be used only.