



Features

- 25A motor load
- Mini size
- Both single and dual relays available.
- Coil wire insulation class H (180 °C)

Contact Capacity

Model	SARG
Nominal switching capacity (res. load)	20A 14VDC
Max. switching current	30 A
Max. switching voltage	16 VDC
Max. switching power	350 W

Contact Load voltage	Load type		Load current A		On/Off ratio		Electrical endurance OPS	Contact material	Ambient temperture	
			1C, 2C		On s	Off s				
			NO	NC						
14VDC	Motor	Make	25	---	0.3	19.7	100,000 cycles	AgSnO ₂	at 23 °C	
		Break	25	---						
	Simulate window operation	Make	25	---	0.2	4	100,000 cycles	AgSnO ₂		
		Stable	10	---						2.3
		Break	25	---						
	Simulate motor operation	Make	27	---	0.02	1.8	100,000 cycles	AgSnO ₂		
		Transient	17	---						0.03
		Break	8	---						
	Resistive	Make	20	---	1	3	200,000 cycles	AgSnO ₂		
		Break	20	---						

Remark:

1. Corresponds to the peak inrush current on initial actuation(motor)
2. Above are non-flasher load.Please heed the anode and cathode's request when wired, common terminal(spring terminal) should connect with anode
3. When the load requirement is different from content of the table above, please contact Sanyou for relay application support

Charateristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	100mΩ Max.	
Operate time	10 msec. Max.	
Release time	10 msec. 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	Functional	10 ~ 550Hz 49/ms ²
	Functional	100 G Min.
Shock resistance	Destructive	10 G Min.
	Mechanical (at 10,800 ops./h)	10,000,000
Endurance (operations)	Electrical (at 900 ops./h)	100,000
	Ambient temperature	-40°C ~ +125°C (no condensation)
Unit weight	Approx. 5.0 g (single); 10.0 g (dual)	

Coil Data (at 20°C)

Nominal voltage (VDC)	Nominal operating current ± 10% (mA)	Coil resistance ± 10% (Ω)	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Max allowable overdrive voltage		Nominal operating power
					at 23°C	at 85°C	
12	53.33	255	7.2	1.0	20	16	Approx. 0.64W 0.8W
12	66.67	180	6.5	1.0	18	14	

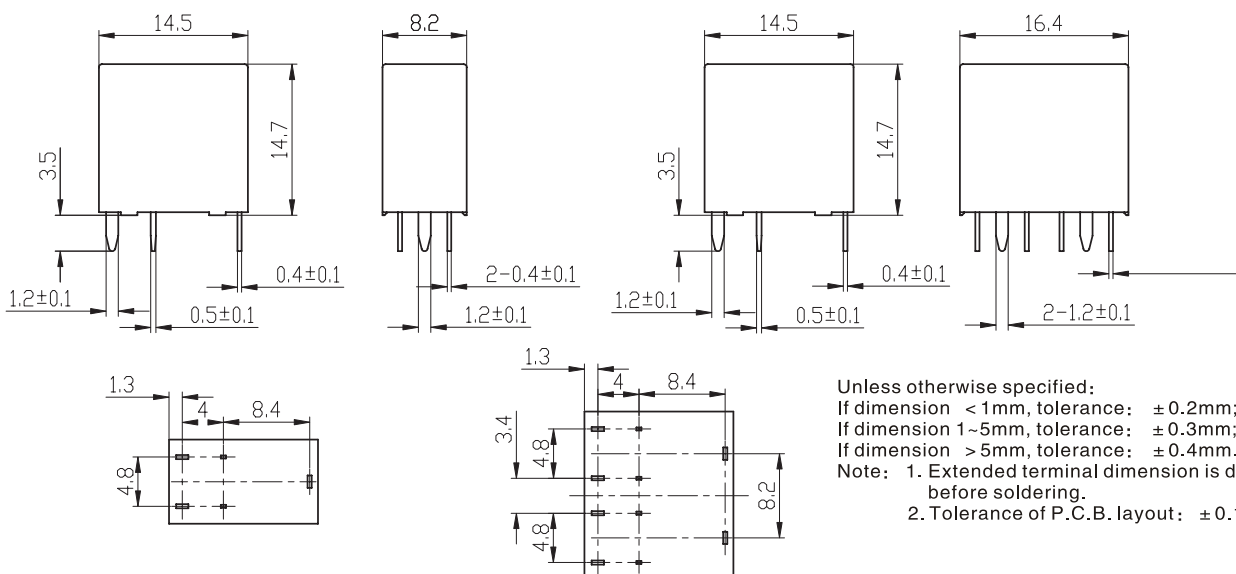
Ordering Information

Nomenclature							
SARA-S-1	12	D	X	X	-XX	Special Parameter: Nil-Standard type, Letter or number-Special requirement	
						Contact Material: Nil-AgSnO ₂	
						Contact form: Nil-Form C M-Form A	
						Coil Power: D-0.64W,H-0.8W	
						Coil Voltage (VDC): 12	
						Number of Poles: 1-Single relay, 2-Dual relays	
						Protective Construction: S-Flux proofed, SH-Sealed type washable	
Type Designation: SARA							

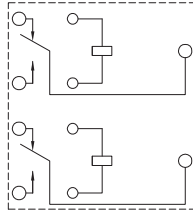
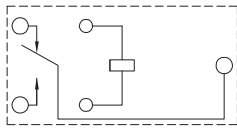
Outline Dimensions, Wiring Diagram, P.C. Board Layout (unit: mm)

Single relay

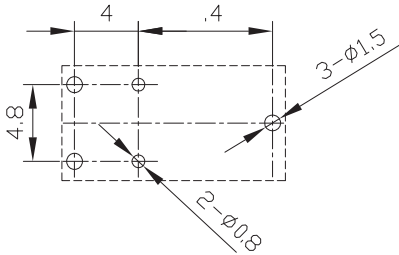
Dual relay



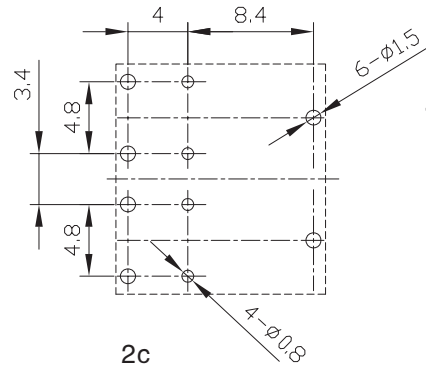
Unless otherwise specified:
 If dimension < 1mm, tolerance: ±0.2mm;
 If dimension 1~5mm, tolerance: ±0.3mm;
 If dimension > 5mm, tolerance: ±0.4mm.
 Note: 1. Extended terminal dimension is dimension before soldering.
 2. Tolerance of P.C.B. layout: ±0.1mm.



Wiring Diagram (bottom view)



1c



2c

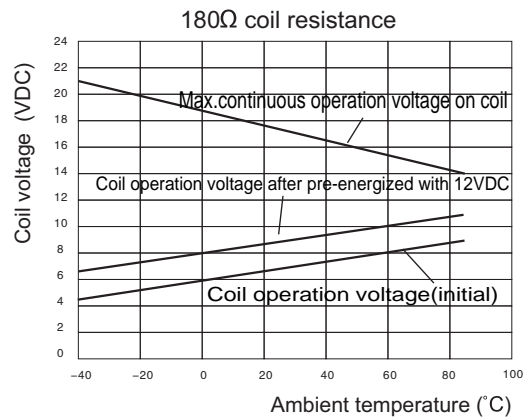
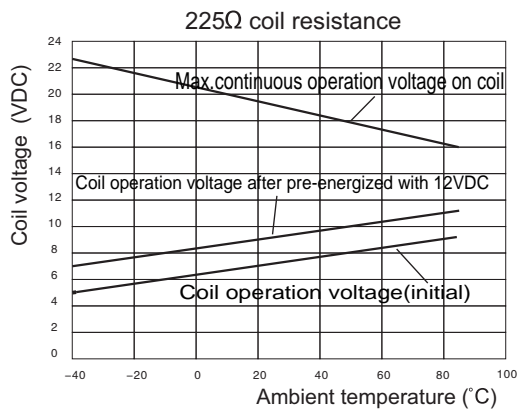
P.C.B. Layout (bottom view)

Typical Applications

- Auto door & window control
- Central door lock
- Indicator lamp control
- seat adjustment
- Mirror adjustment, Wiper control

Characteristic Curves

1. Coil operating voltage range



2. Load limit curve (at 23°C)

