

Features:

- 20A switching capability
- Subminiature Relay
- 1 Form A contact available

Typical Applications:

- Headlamps controls
- Pump control
- Automobile horn control
- A/C compression clutch control

Contact Data

Contact arrangement	1 Form A
Contact material	silver alloy
Contact voltage drop	200mv/at 10A(max)
Contact load	

Contact voltage	Load type		Contact current (A)	Electrical endurance (OPS)
			1A NO	
14VDC	resistive	on	20	1×10 ⁵
		off	20	
	general	on	40	1.5×10 ⁵
		off	20	
	lamp load	on	100	1.5×10 ⁵
		off	20	

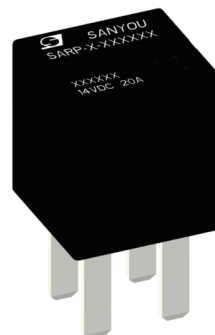
Note: coil voltage 12VDC, frequency 2s on:2s off, room temperature

Max. Contact Voltage	14VDC
Max. Contact Current	100A
Operate time (at nominal volt.)	≤10ms
Release time (at nominal volt.)	≤10ms

Coil Data

Nominal Voltage (VDC)	Nominal Operating Current ±10% (A)	Coil Resistance ±10% (Ω)	Parallel Resistance (Ω)	Equivalent Resistance (Ω)	Operate Voltage (VDC)	Release Voltage (VDC)	Max. Allowable Voltage (VDC)	Nominal Operating Power (W)
12	0.08	151	---	---	≤7.2	≥1.2	15.6	0.95
12	0.091	151	1000	131	≤7.2	≥1.2	15.6	1.1

Note: To prevent overheating and burnout, the coil should not be continuously subjected to a voltage greater than the maximum allowable voltage.



Insulating Data

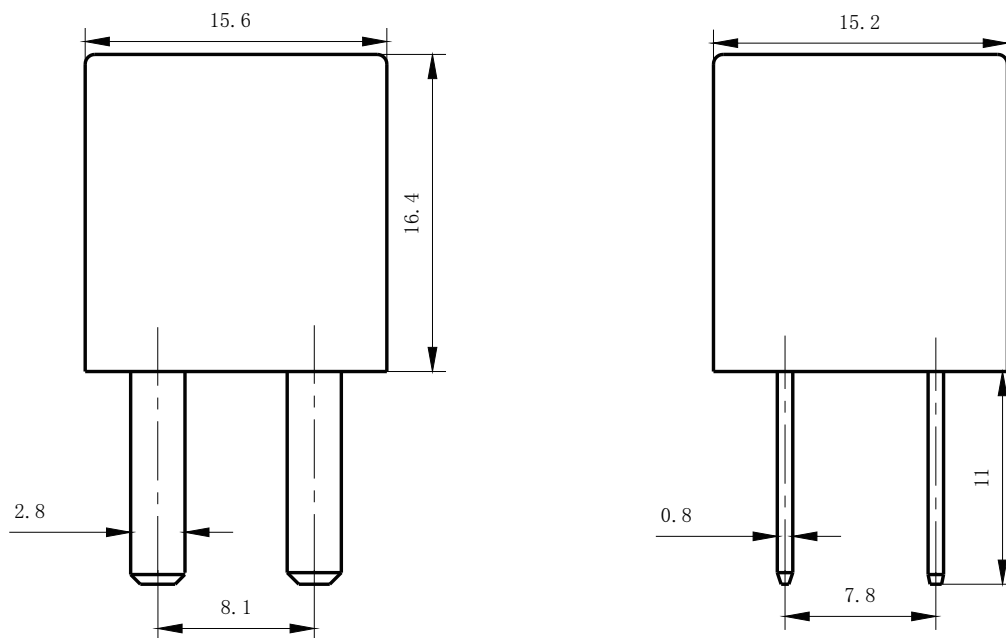
Insulation resistance	100MΩ (500VDC)
Dielectric strength	
Between open contacts	500VAC, 50/60Hz 1min.
Between coil and contact	500VAC, 50/60Hz 1min.

Other Data

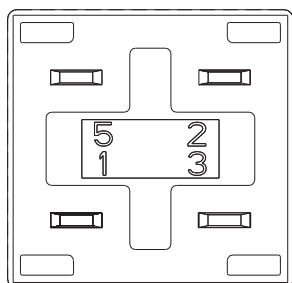
Shock resistance	Functional Destructive	20G 100G
Vibration resistance	10Hz to 500Hz	5G
Mechanical endurance	1×10 ⁶ ops	
Ambient temperature	-40°C to +125°C	
Humidity	5% to 85%RH	
Weight	Approx. 10g	

Note: The above parameters are initial values

Dimensions



Wiring diagram (bottom view)



Unless otherwise specified:

If dimension < 1mm, tolerance: $\pm 0.2\text{mm}$;

If dimension 1~5mm, tolerance: $\pm 0.3\text{mm}$;

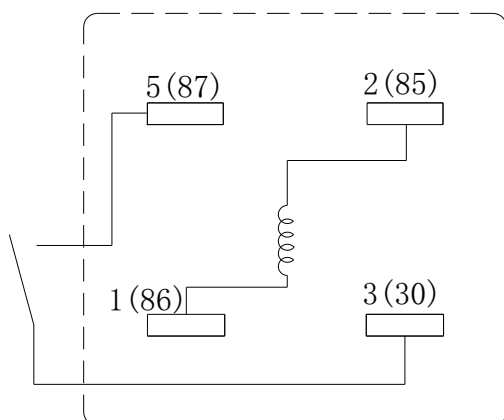
If dimension > 5mm, tolerance: $\pm 0.4\text{mm}$;

Note:

1.Extended terminal dimension is dimension before soldering

2.Tolerance of mounting holes: $\pm 0.1\text{mm}$

Wiring Diagrams



Product Code Structure

SARP	-S	- 1	12	D	M	-X	-XX	
								Special Parameter: Nil-Standard type Letter or number-Special requirement
								Accessory Form: Nil-Without accessory,R-With resistor
								Contact Form:Nil-Form C, M-Form A
								The power consumption of the coil:D-0.95W
								Coil specification(VDC): 12
								Number of Poles:1-1 Pole
								Protective Construction:S-Flux proofed, SH-Sealed type washable
								Type Designation:SARP

Disclaimer:

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.