



### Features

- 70A Contact switching capability
- 125°C High working temp
- 1 Form A contact available
- Fluxproof and sealed type available
- Resistance or diode paralleled type available

### Typical Applications

- Rear window defogger , Battery breaking device  
Automotive AC , Foglight control
- Electric power distributor , ABS Traction control system.

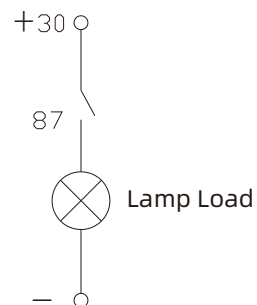
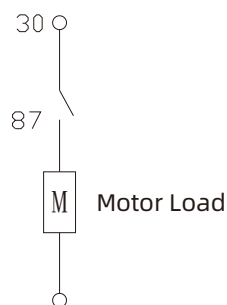
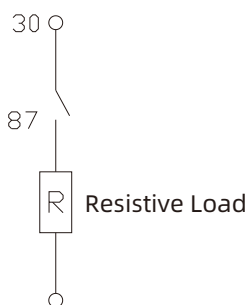
### Contact Data

Nominal switching capacity	70A 14VDC
Max. switching current	on(NO):200A (surge current in lamp load, 14VDC)
	off(NO):70A (resistive load,14VDC)
Max. persistent current	70A (at23°C) 50A (at85°C)

Contact rating voltage	Load type		contact rating current(A)	duty factor	endurance (cycles)	contact material
14VDC	Resistive load	Making	70	2s : 2s	1x10 <sup>5</sup>	AgSnO <sub>2</sub>
		Breaking	70			
	The motor load	Making	150 <sup>a</sup>	2s : 4s	1x10 <sup>5</sup>	AgSnO <sub>2</sub>
		Breaking	50			
	Light load	Making	200 <sup>a</sup>	2s : 2s	1x10 <sup>5</sup>	AgSnO <sub>2</sub>
		Breaking	40			
27VDC	Resistive load	Making	40	2s : 2s	1x10 <sup>5</sup>	AgSnO <sub>2</sub>
		Breaking	40			

Notes:a.Time ratio of Peak current Stable current is 1:10.

### Wiring Diagram for different Loads



## Parameters Data

Contact Material	Silver alloy	
Dropping Voltage of Contacts	200mV Max (at 10A)	
Operate Time (at rated coil voltage)	10msec.Max.	
Release time (at rated coil voltage)	Ordinary type:10msec.Max.      Parallel resistor or diode type :15 msec. Max.	
Initial Insulation Resistance	100MΩ Min.(500VDC)	
Initial Dielectric Strength	Between open contacts:	500VAC, 50/60Hz 1min.
	Between contacts and coil:	500VAC, 50/60Hz 1min.
Shock Resistance	NO 30G	
Vibration Resistance	5 ~ 22.3Hz at double amplitude of 10 mm 22.3~500Hz,98m/s <sup>2</sup>	
Endurance (operate)	Mechanical (10,800 ops./h)	1×10 <sup>7</sup> ops
	Electrical (900 ops./h)	See the contact parameters table
Ambient Temperature	-40°C to +125°C (No condensation)	
Weight	Approx. 36.0g	

## Coil Data (at 20°C)

Rated Voltage (VDC)	Operating Current ±10(mA)	coil resistance ±10(Ω)	parallel Resistance (Ω)	Equivalent (Ω)	Max. Allowable Resistance Voltage (VDC)	Operate Voltage Max.(VDC)	Release Voltage Min.(VDC)	Coil Power (W)
12	133.33	90	---	---	150% of Rated Voltage	60% of Rated Voltage	10% of Rated Voltage	Approx. 1.6
12	133.33	90	680	80				Approx. 1.8
24	66.7	360	---	---				Approx. 1.6
24	66.7	360	2700	320				Approx. 1.8

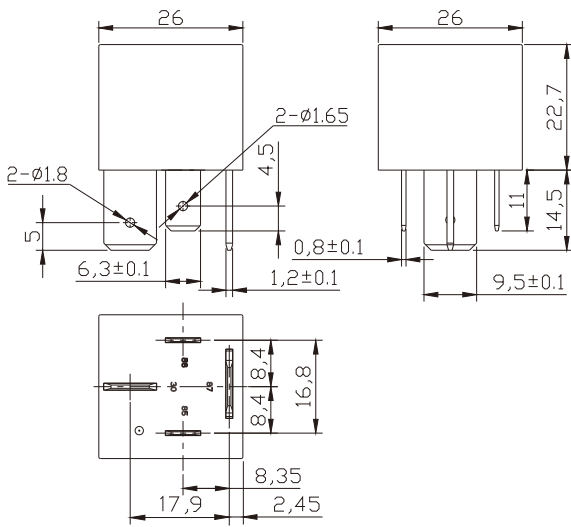
## Ordering Information

SARJ	-S	-1	12	D	M	F	R	-XX	Special Parameter: Nil-Standard type,01-terminal without hole
									Accessory Form: Nil-without accessory, R-Parallel resistor D-parallel diode(see wiring diagram) DC-Parallel diode(see wiring diagram)
									Mounting type : Nil-without bracket, F-with iron bracket,P-PCB type
									Contact Form: M-Form A
									Coil Power: D- 1.6W /1.8W
									Coil Voltage(VDC): 12 , 24
									Number of Poles:1-1 Pole
									Protective Construction:Nil-Dustproof , S-Fluxproof
									Type Designation:SARJ

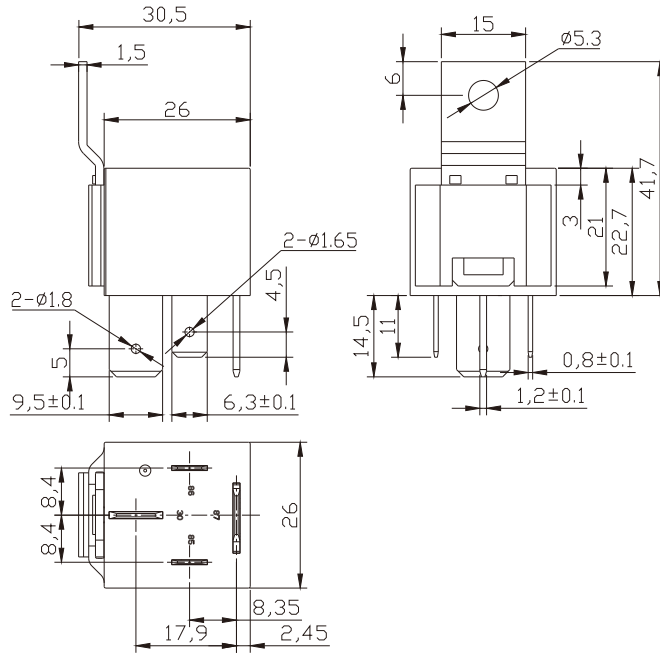
Outline Dimensions, Wiring Diagram (unit:mm)

Outline Dimensions

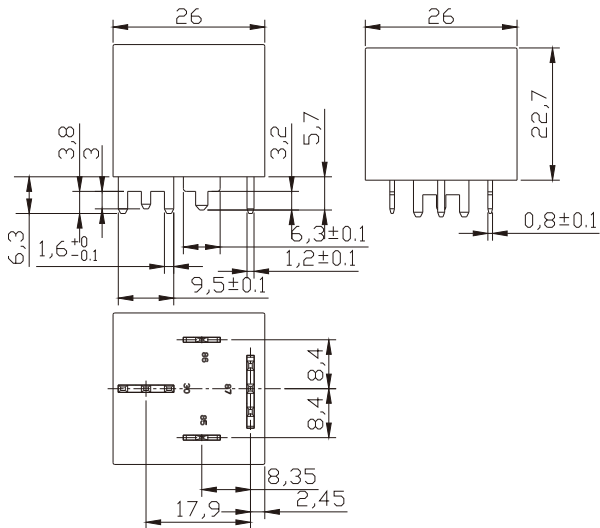
Standard Type



With Bracket Type



PCB type



Unless otherwise specified:

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

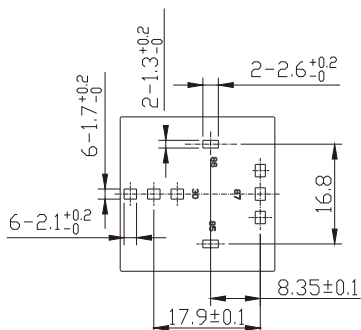
If dimension 1~5mm, tolerance: ±0.3mm;

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

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

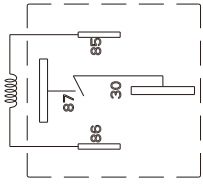
2. Tolerance of P.C.B. layout: ±0.1mm.

P.C.B. Layout

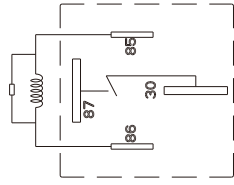


## Electrical schematic diagram

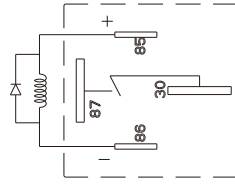
### A Type



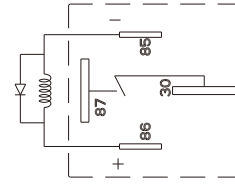
Standard type



Parallel resistance



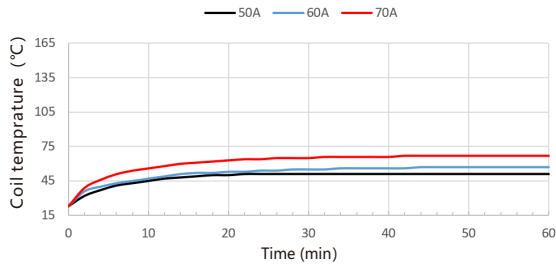
Parallel diode(D Type)



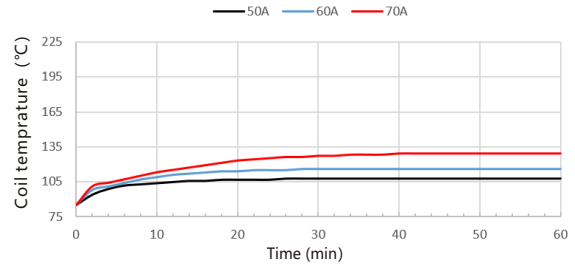
Parallel diode(DC Type)

## Characteristic Curves

Terminal temperature rise curve (23°C)  
 Test items: SARJ-S-112DM(1.6W)  
 Amount: 3PCS  
 Coil Voltage: 12VDC  
 Load current: 50A,60A,70A  
 Environment temperature: 23°C



Terminal temperature rise curve (85°C)  
 Test items: SARJ-S-112DM(1.6W)  
 Amount: 3PCS  
 Coil Voltage: 12VDC  
 Load current: 50A,60A,70A  
 Environment temperature: 85°C



### 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.