

## Features

- ≤ Miniature automotive relay, several mounting types available.
- ≤ 40A switching capability.
- ≤ Dustproof and sealed type available.
- ≤ 1 Form A, 1 Form C and 2 Form A contact configuration available.
- ≤ Resistance or diode paralleled type available.

## Contact Capacity

Model	SARE-DM	SARE-D
Nominal switching capacity (res. load)	40A 14VDC	NO/NC : Standard type: 30A/20A 14VDC High capacity: 40A/30A 14VDC
Max. switching current	60A	60A
Max. switching voltage	75VDC	75VDC
Max. switching power	560W	560W

## Characteristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	100m Max.	
Operate time (at nominal volt.)	10msec. Max.	
Release time (at nominal volt.)	ordinary type:5msec. Max.    with resistor or diode type :15 msec. Max.	
Initial insulation resistance	100M Min.(DC500V)	
Initial dielectric strength	Between open contacts : AC500V , 50/60Hz 1Min.	
	Between coil and contact : AC500V , 50/60Hz 1Min.	
Vibration resistance	Functional	10 ~ 55Hz at double amplitude of 1.5 mm
	Destructive	10 ~ 55Hz at double amplitude of 1.5 mm
Shock resistance	Functional	10G Min.
	Destructive	100G Min.
Endurance (operations)	Mechanical (at 10,800 ops./h)	10,000,000
	Electrical (at 600 ops./h)	100,000
Ambient temperature	-40°C ~ +125°C (no condensation)	
Unit weight	Approx. 35.5 g	

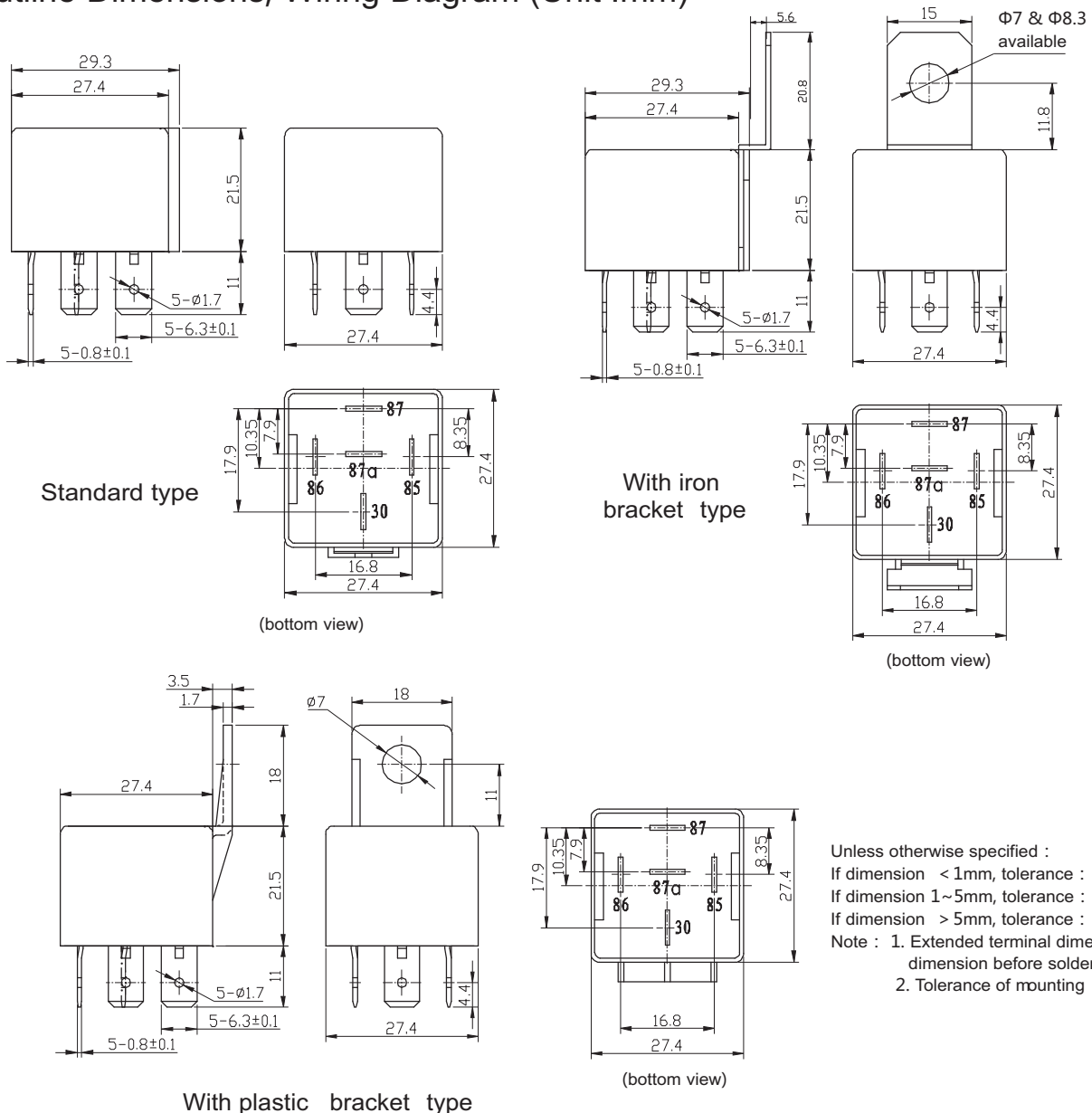
## Coil Data (at 20°C)

Nominal voltage (VDC)	Nominal operating current ±10% (mA)	Coil resistance ±10% (Ω)	Parallel resistance (Ω)	Equivalent resistance (Ω)	Max. Allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power						
6	300	20	---	---	130 % of nominal voltage	70 % of nominal voltage	10 % of nominal voltage	1.8W						
12	150	80	---	---										
24	75	320	---	---										
6	300	20	180	18				130 % of nominal voltage	70 % of nominal voltage	10 % of nominal voltage	2.0W			
12	150	80	680	71.5										
24	75	320	2,700	286										
6	375	16	---	---							130 % of nominal voltage	70 % of nominal voltage	10 % of nominal voltage	2.2W
12	182	66	---	---										
24	92	260	---	---										

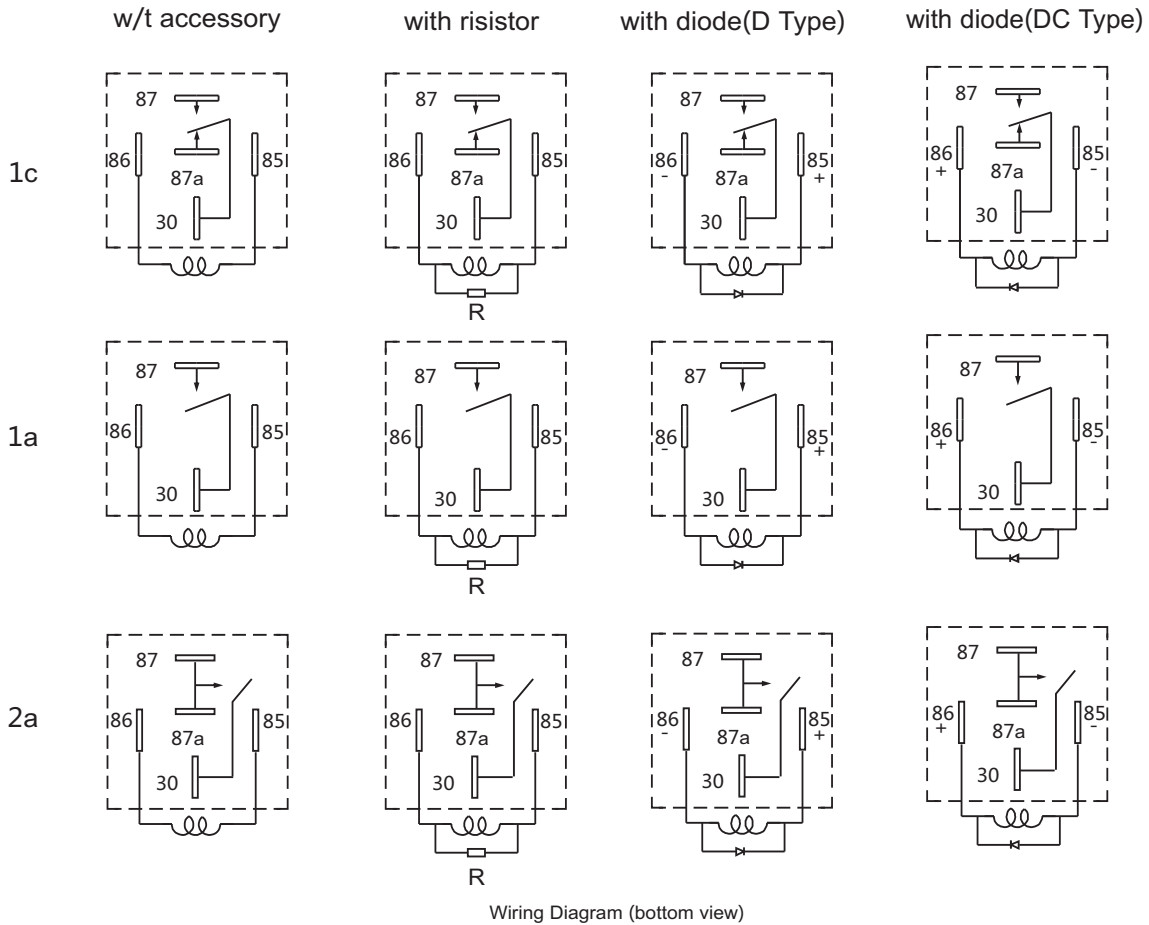
Ordering Information

Nomenclature										
SARE	-S	-1	12	D	M	F	R	-XX		
								Special Parameter : Nil-Standard type, Letter or number-Special requirement		
								Accessory Form : Nil-Without accessory, R-With resistor D-With diode, DC-with diode(see wiring diagram)		
								Cover Type : Nil-Without bracket, F-With bracket		
								Contact Form : Nil-Form C, M-Form A		
								Coil Power : D-1.8W/2.0W, L-2.2W		
								Coil Voltage (VDC) : 06, 12, 24		
								Number of Poles : 1-1 Pole, 2-2 Poles (Form A only)		
								Protective Construction : Nil-Dust Cover S-Flux proofed SH-Sealed type washable		
Type Designation : SARE										

Outline Dimensions, Wiring Diagram (Unit :mm)



Unless otherwise specified :  
 If dimension < 1mm, tolerance :  $\pm 0.2$ mm;  
 If dimension 1~5mm, tolerance :  $\pm 0.3$ mm;  
 If dimension > 5mm, tolerance :  $\pm 0.4$ mm.  
 Note : 1. Extended terminal dimension is dimension before soldering.  
 2. Tolerance of mounting hole s :  $\pm 0.1$ mm.



## Typical Applications

- ≤ Battery breaking device, rear window defogger, fuel pump control, foglight control, headlight control.
- ≤ Automotive air conditioner, cooling fan control.

### 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.