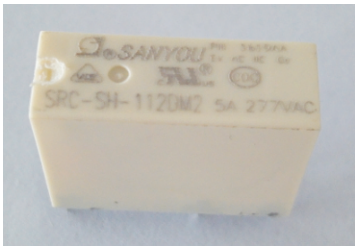
SANYOU RELAYS
Relays for advanced technology

Miniature Power Relay

SRC-Series



Features

- Small size (20.5x7.2x16.6mm) for high density PCB mounting.
- 10A contact switching capability.
- High breakdown voltage： 4000V (between coil and contact).
- Compliance with RoHS and the requirements for White Goods
- Compliance with IEC60335-1

Safety Approval

UL , C-UL File No.： E179745

TUV File No.： R50252208

CQC File No.：CQC13002089945

VDE File No.： 40045446

Contact Capacity

Model	SRC	SRCH
Nominal switching capacity (res. load)	5A 277VAC	7A 277VAC
Max. switching current	10A	10A
Max. switching voltage	277VAC	277VAC
Max. switching power	2770VA	2770VA

Characteristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	100mΩ Max.	
Operate time (at nominal volt.)	20msec. Max.	
Release time (at nominal volt.)	10msec. Max.	
Initial insulation resistance	1,000MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts： AC750V 50/60Hz 1min.	
	Between coil and contact： AC4,000V, 50/60Hz 1min.	
Vibration resistance	Destructive	10～55Hz at double amplitude of 1.5 mm
	Functional	10～55Hz at double amplitude of 1.5 mm
Shock resistance	Destructive	100G Min.
	Functional	10G Min.
Endurance (operations)	Mechanical (at 10,800 ops./h)	10,000,000
	Electrical (at 360 ops./h)	5A 277VAC: 100,000 SRC 7A 277VAC: 100,000 SRCH
Ambient temperature	-40℃～+105℃ (no condensation)	
Unit weight	Approx. 3.9 g	

Coil Data (at 20℃)

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
5	40.00	125	130 % of nominal voltage	75 % of nominal voltage	5 % of nominal voltage	.Approx 0.20W
6	33.33	180				
9	22.22	405				
12	16.67	720				
18	11.11	1,620				
24	8.57	2,880				

Coil Data (at 20℃)

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
5	72.00	69	130 % of nominal voltage	75 % of nominal voltage	5 % of nominal voltage	.Approx 0.36W
6	60.00	100				
9	40.00	225				
12	30.00	400				
18	20.00	900				
24	15.00	1,600				

Safety Approval Ratings

(Note:More detail of approval ratings,please refer to the safety certification)

Approval	CQC	UL/CUL	TUV	VDE
File No.	CQC13002089945	E179745	R50252208	40045446
Approved ratings	SRC 5A 277VAC SRCH 7A 277VAC	SRC 5A 277VAC, Resistive 5A 277VAC, General Use SRCH 7A 277VAC, Resistive 7A 277VAC, General Use TV-3 120VAC	SRC 5A 277VAC SRCH 7A 277VAC	SRC 5A 277VAC SRCH 7A 277VAC

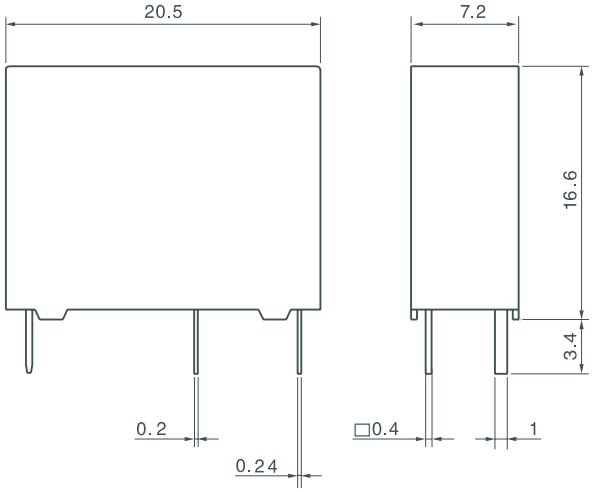
Ordering Information

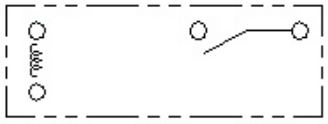
Nomenclature

SRC -S -1 12 D M 1 -F -XX

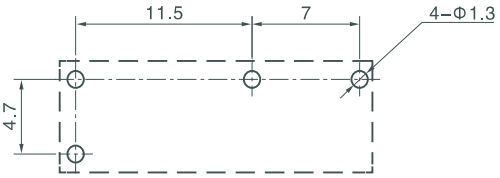
- Special Parameter : Nil-Standard type
- Insulation System : Nil-Standard, B-Class B, F-Class F
- Contact Material : Nil-AgSnO2,2-AgNi,3-AgSnO2+AU,4-AgNi+AU
- Contact Form : M-Form A
- Coil Power : D-0.20W, H-0.36W
- Coil Voltage (VDC) : 05, 06, 09, 12, 18, 24
- Number of Poles : 1-1 Pole
- Protective Construction : S-Flux proofed, SH-Sealed type washable
- Type Designation : SRC/SRCH(High load model)

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





Wiring Diagram (bottom view)



P.C.B. Layout (bottom view)

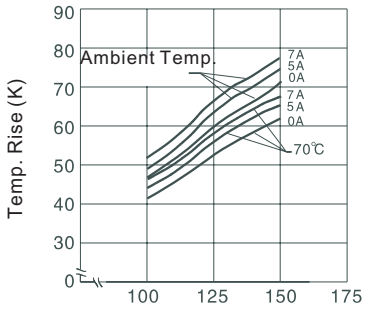
Unless otherwise specified :
If dimension < 1mm, tolerance : ±0.2mm;
If dimension 1~5mm, tolerance : ±0.3mm;
If dimension > 5mm, tolerance : ±0.4mm.
Note : 1. Extended terminal dimension is dimension before soldering.
2. Tolerance of P.C.B. layout : ±0.1mm.

Typical Applications

- Telecommunication equipment
- Office equipment
- Safety equipment
- Home appliances such as air conditioner, microwave oven

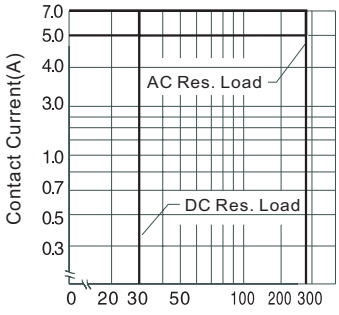
Characteristic Curves

Coil Temp. Rise



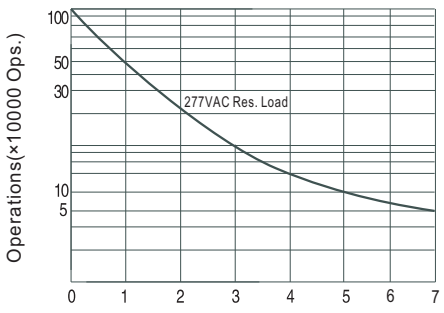
Percentage of Nominal Coil Voltage

Max. Switching Power



Contact Voltage(V)

Endurance Curve



Contact Current(A)

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.