

### Features:

- High contact capability: 17A switching capability

- Low coil power consumption
   Micro-miniature relay, standard PCB terminals
   Compliance EU RoHS and the requirement of white home appliances
   Compliant with IEC60335-1&CTI 250V.
   IEC60079-15 compliant product is available

### Typical applications:

- Home appliances: air conditioner, heater, etc.
- Vending machine.
- Office equipment: computer, fax machine, etc.
- Electric controlled window, car antenna, door lock, etc.







### **Approvals**

UL, c-UL (File No.): E190598

CQC (File No.): CQC02001002126, CQC10002050459, CQC21002306489 VDE (File No.): 40034479

Contact Data	
Contact arrangement	1form C( CO)or 1form A( NO)
Rated voltage	250VAC
Max.switching voltage	277VAC
Rated current	17A
Min. recommended contact load	1A, 6VDC
Breaking capacity max.	4709VA
Contact material	AgNi, AgSn0₂
Frequency of operation	360 ops./h
Operate/release time max.	8ms/5ms
Electrical endurance	See electrical endurance graph

Contact ratings

Oontac	t ratings					
Type Contact		Load	Cycles			
IEC 61810						
SRD(I) -L	A/C(NO)	17A,250VAC,cos	2.5X10 <sup>4</sup>			
UL 60947-4	<b>1-1</b>					
SRD(I) -L	A/C(NO)	17A,250VAC,cos φ=1,105℃	5X10 <sup>4</sup>			
SRD(I) -L	A/C(NO)	1/2 hp, 250/120 VAC, 85℃	3X10⁴			
SRD(I) -L	A/C(NO)	TV-8, 250/120 VAC, 85°C	2.5X10 <sup>4</sup>			
GB/T 21711.1-2023						
SRD(I) -L	A/C(NO)	17A,250VAC,105°C	2X10 <sup>4</sup>			
EN 60730-	1					
SRD(I) -L	A/C(NO)	17A,250VAC,85℃	2.5X10 <sup>4</sup>			
Mechanical	Mechanical endurance ≥1x10 <sup>7</sup>					

# **Coil Data**

Coil voltage range:	5 to 60VDC
Operative range, IEC 61810	2
Coil insulation system according UL	Class F

### Coil Data(continued)

Coil versions, DC coil						
Rated	Operate	Release	Coil	Rated coil		
voltage	voltage	voltage	resistance	powers		
VDC	VDC	VDC	Ω (1±10%)	mW		
5	≤3.75	≥0.5	70	360		
6	≤4.5	≥0.6	100	360		
9	≤6.75	≥0.9	225	360		
12	≤9	≥1.2	400	360		
15	≤11.25	≥1.5	625	360		
18	≤13.5	≥1.8	900	360		
24	≤18	≥2.4	1600	360		
48	≤36	≥4.8	6400	360		
60	≤45	≥6	10000	360		

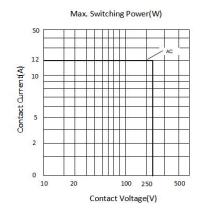
All figures are given for coil without pre-energization, at ambient temperature 20°C

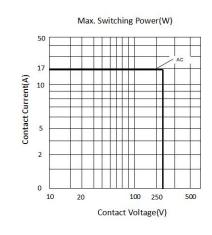
### **Insulation Data**

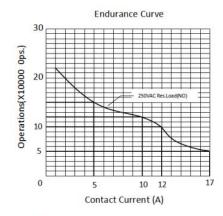
Initial dielectric strength	
between open contacts	750VAC
between contact and coil	SRD-L: 1500VAC SRDI-L: 2500VAC
Clearance/Creepage	
between contact and coil (Clearance)	≥1.5mm(actual)
between contact and coil (Creepage)	≥3.0mm(actual)
Material group of insulation parts	Illa
Tracking index of relay base	PTI 175V/PTI 250V

## Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH					
Ambient temperature -40 ℃ to +105 ℃ Category of environmental protection					
IEC 61810	RTII - flux proof				
	RTIII - Sealed type washable				
Weight	Approx. 8.0g				
Resistance to soldering heat THT (IEC 60068-2-20)	260°C/5s				
Packaging/unit	tube, tray				



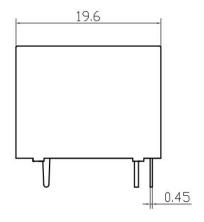


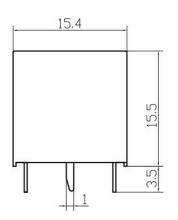


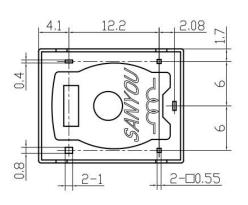
(1)Test conditions: room temperature, flux-proof product, resistive load, 1s on, 9s off.
(2)The above curves are for reference only, and the final result is subject to the experiment.



### **Dimensions**

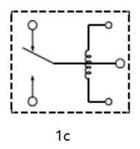


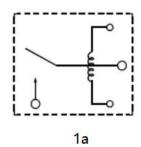




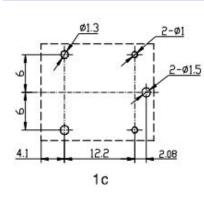
(bottom view)

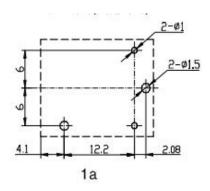
# Wiring Diagrams (bottom view)





# PCB Layouts (bottom view)





In case of no tolerance shown on outline dimension

If dimension < 1 mm, tolerance: ±0.2mm If dimension 1~5mm, tolerance: ±0.3mm If dimension > 5mm, tolerance: ±0.4mm Notes:

1.The dimension of pin is the size before tinning

2.Tolerance of PCB layout: ±0.1 mm.



### **Product Code Structure**

SRD	-S	-1	12	D	М	2	-F	-L	xx
									Special Parameter:  Nil-Standard type  Letter or number-Special requirement
									L- Low temperature rised type
									Insulation System :  Nil - Standard  B - Class B  F - Class F
									Contact Material:  2 - AgSnO <sub>2</sub> 4 -3 Compounds AgSnO <sub>2</sub> (Form C)  6 - AgNi  7 - AgNi & AgSnO <sub>2</sub> 8 - 3 Compounds AgNi (Form C)
									Contact Form :  Nil - Form C M - Form A
									Coil power: D-0.36W
									Rated coil voltage(VDC): 05, 06, 09, 12, 15, 18, 24, 48, 60
									Number of poles: 1-1Pole
									Protective construction: S- Flux-proof SH- Sealed type washable
Type  (1) Flux-proofed relays can not be used in the environment with pollutants like H <sub>2</sub> S, SO <sub>2</sub> .							ont	. mall4	Type : SRD/SRDI

- (1) Flux-proofed relays can not be used in the environment with pollutants like H<sub>2</sub>S, SO<sub>2</sub>,NO<sub>2</sub>, dust, etc.
- (2) Water cleaning or surface process is not suggested after the flux-proof relays are assembled on PCB.
- (3) The customer special requirement express as special code after evaluating by Sanyou.
- (4) "Ex" stands for products compliant with IEC60079-15.

### **Examples of Ordering Codes**

SRD-S-112DM2-L relay SRD-L, Flux-proof, rated DC voltage 12V, coil power 0.36W,1NO, and contact material AgSnO<sub>2</sub>.

SRD-S-112D4-L relay SRD-L, Flux-proof, rated DC voltage 12V, coil power 0.36W,1CO, and contact material AgSnO<sub>2</sub>.

# Disclaimer

The specification is for reference only. Specifications are subject to change without prior notice.

We could not evaluate all the performance and all the parameters for every possible applications. Thus the users should in a right position to choose suitable product for their own application. For sealed relays, after installation and cleaning, please open the ventilation hole in the case before use. If there is any query, please contact Sanyou for technical services. However it is the user's responsibility to determine which product should be used.