



### Features

- High contact capability: 12A switching capability.
- Low coil power consumption, low price.
- Microminiature relay, standard PCB terminal.

### Safety Approval

UL, C-UL File No.: E190598  
TUV File No.: R50142424  
CQC File No.: CQC02001002126  
VDE File No.: 40034479

### Contact Capacity

Model	SRD -DM	SRD -D & SRD-DB
Nominal switching capacity (res. load)	10A 277 VAC	7A 250VAC
Max. switching current	15A	12A
Max. switching voltage	277 VAC	250VAC
Max. switching power	2,770VA	1,750VA

### Charateristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	100mΩ Max.	
Operate time (at nominal volt.)	8msec. Max.	
Release time (at nominal volt.)	5msec. Max.	
Initial insulation resistance	100MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts: AC750V, 50/60Hz 1Min.	
	Between coil and contact: AC1,500V, 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 cycles
	Electrical (at 1,800 ops./h)	100,000 cycles
Ambient temperature	-40°C ~ +105°C (no condensation)	
Unit weight	Approx. 8.5 g	

### Coil Data (at 20°C)

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
3	120.00	25	130 % of nominal voltage	75 % of nominal voltage	5 % of nominal voltage	0.36W
5	71.42	70				
6	60.00	100				
9	40.00	225				
12	30.00	400				
15	24.00	625				
18	20.00	900				
24	15.00	1,600				
48	7.50	6,400				
60	6.00	10,000				

Safety Approval Ratings

Approval	CQC	TUV	VDE	UL/CUL
File No.	CQC02001002126	R50142424	40034479	E190598
Approved ratings	7A 250VAC 5A 240VAC  10A 250VAC (Form A & Form C NO)	7A 250VAC  7A 28VDC  10A 250VAC (Form A)	Contact 2 or blank: 10A 250VAC(Form C,NO) 7A 250VAC(Form C,NO) 6A 250VAC(Form C, NC)  Contact 2 or blank: 10A 250VAC(Form A) 7A 250VAC(Form A)  Contact 3: 10A 250VAC(Form C,NO) 7A 250VAC(Form C,NO) 6A 250VAC(Form C, NC)  Contact 3: 10A 250VAC(Form A) 7A 250VAC(Form A)	Contact 2 ( Form C)or blank(Form A or Form B): 12A 125VAC,Resistive,NO&NC 15A 125VAC,Resistive,NO 10A 250VAC,Resistive,NO 7A 250VAC,General use,NO&NC 3A 125VAC,General Use,NO&NC 10A/6A 250VAC, General use, NO/NC 10A/6A 125VAC, General use, NO/NC 10A/6A 28VDC,General use,NO/NC 1/3HP 250VAC,NO&NC FLA 5A, LRA 10A, 120/ 240VAC, NO Pilot Duty: 240VA, 240VAC TV-3, 120VAC, NO TV-5, 120VAC, NO  Contact 2(Form A or Form B)or blank ( Form C): 12A/15A 125VAC, Resistive&General use,NO 10A 250VAC/28VDC,Resistive&General use,NO 1/3HP 250VAC,NO FLA 5A, LRA 10A, 120/ 240VAC, NO TV-3, 120VAC, NO  Contact 1 or 3: 12A/15A 125VAC, Resistive&General use,NO 10A 250VAC/28VDC,Resistive&General use,NO 1/3HP 250VAC,NO FLA 5A, LRA 10A, 120/ 240VAC, NO TV-3, 120VAC, NO  Contact 4: 7A 250VAC,Resistive&General use,NO&NC 10A 250VAC,Resistive&General use,NO  Contact 5: 7A 250VAC,Resistive&General use,NO&NC 10A 250VAC,Resistive&General use,NO  Contact 6(Form A or Form C): 10A 277 VAC,Resistive&General use,NO 7A 277 VAC,Resistive&General use,NC

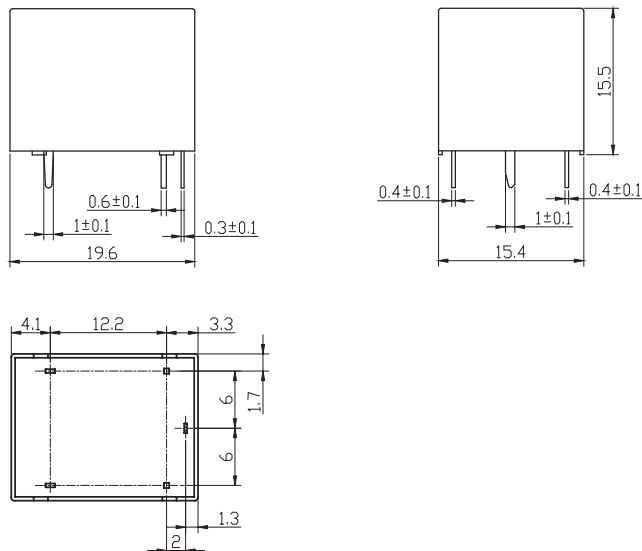
Ordering Information

Nomenclature										
SRD	-S	-1	12	D	M	1	-	F	-XX	Special Parameter: Nil-Standard type, Letter or number-Special requirement  Insulation System: Nil-Standard, B-Class B, F-Class F  Contact Material: Moveable Contact for form C    Moveable Contact for form A    Moveable Contact for form B Nil- AgSnO2 φ 2.8                      Nil- AgSnO2 φ 3.0                      Nil- AgSnO2 φ 3.0 1- AgCdO, φ 2.8                          1- AgCdO φ 3.0                          1- AgCdO φ 3.0 2- AgSnO2 φ 3.0                          6- AgNi φ 3.0 3- AgCdO φ 3.0 4- 3C omp ounds φ 3.0 5- Cu plated with La φ 3.0 6- AgNi φ 3.0  Contact Form: Nil-Form C, B-Form B, M-Form A Coil Power: D-0.36W Coil Voltage (VDC): 03, 05, 06, 09, 12, 15, 18, 24, 48, 60 Number of Poles: 1-1 Pole Protective Construction: S-Flux proofed, SH-Sealed type washable Type Designation: SRD

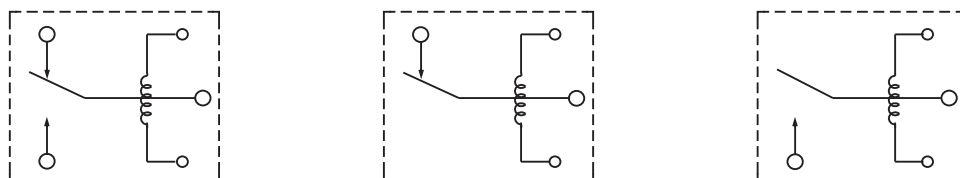
Remark:

1. Only "-D2,-D3,-DM" type will have VDE logo on the case
2. The diameter of all stationary contacts are φ 3.0 mm.

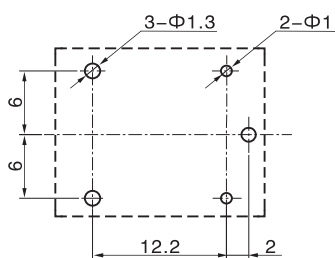
## Outline Dimensions, Wiring Diagram, P.C. Board Layout (unit: mm)



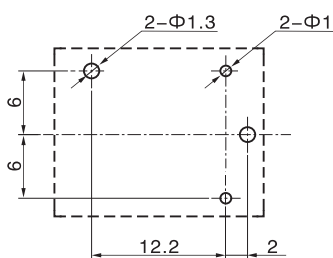
Unless otherwise specified:  
 If dimension < 1mm, tolerance:  $\pm 0.2\text{mm}$ ;  
 If dimension 1~5mm, tolerance:  $\pm 0.3\text{mm}$ ;  
 If dimension > 5mm, tolerance:  $\pm 0.4\text{mm}$ .  
 Note: Extended terminal dimension is dimension before soldering.



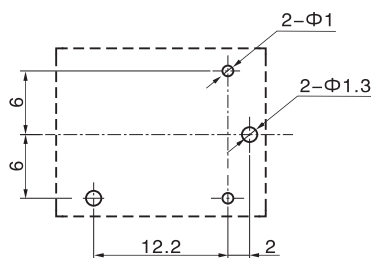
Wiring Diagram (bottom view)



1c



1b



1a

P.C.B. Layout (bottom view)

Tolerance of P.C.B. layout:  $\pm 0.1\text{mm}$ .

## Typical Applications

- Home appliances such as air conditioner, heater, etc.
- Automat      ● Office equipment such as computer, fax machine, etc.
- Automatic electric controlled window, automotive antenna, door lock, etc.

## Characteristic Curves

