

# Miniature Power Relay

# **SRG-Series**



- High Contact Switching Capability:17 A
- Lower coil power and Price
- Microminiaturize; Standard PCB terminal
- Compliance with RoHS and the requirements for White Goods
- Compliance with IEC60335-1 GWIF850°C/GWIT775°C CTI>=250V
- Ambient temperature range -40°C ~ 105°C
- Load switching 17A/277VAC; TV-8/125VAC, Max. 20A/277VAC
- Provided with NO, NC and CO Contact form
- Low coil power 0.36W, Class F insulation system
- Withstanding 6KV impulse voltage. Dielectric strength 2.5KV r.m.s
- Sealed and flux proof available

# Safety Approval

UL, C-UL File No.: E190598

VDE File No.40037165

CQC File No.: CQC13002089151

# **Contact Capacity**

Model	SRG
Nominal switching capacity (res. load)	17A 250VAC
Max. switching current	20A
Max. switching voltage	277VAC
Max. switching power	4709VA

### Characteristic Data

Contact material	Silver alloy			
Initial contact resistance	100mΩ Max. (1A 6VDC)			
Operate time (at nominal volt.)	15msec. Max. (no diode)			
Release time (at nominal volt.)	10msec. Max. (no diode)			
Initial insulation resistance	1000MΩ Min. (DC500V)			
Initial dielectric strength	Between open contacts: AC1,000V, 50/60Hz 1min.			
	Between coil and contact: AC2,500V, 50/60Hz 1min.			
Vibration resistance	Destructive	10 ~ 55Hz at double amplitude of 1.5 m		
	Functional	10 ~ 55Hz at double amplitude of 1.5 mm		
Shock resistance	Destructive	100G Min.		
	Functional	10G Min.		
Endurance	Mechanical (at 10,800 ops./h)	10,000,000 cycles (at room temperature)		
(operations)	Electrical (at 360 ops./h)	100,000 cycles (at room temperature)		
Ambient temperature	-40°C ~ +105°C (no condensation)			
Unit weight	Approx. 15 g			

### Coil Data (at 20°C)

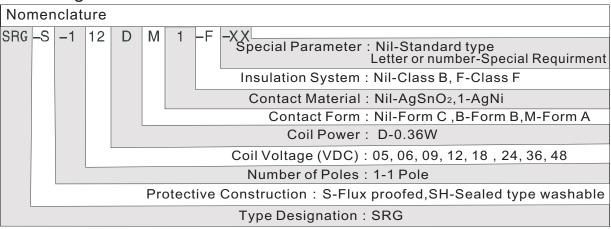
Nominal voltage (VDC)	Nominal operating current ± 10% (mA)	Coil resistance ± 10% (Ω)	Max. allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
5	72.00	69.5				
6	60.00	100				
9	40.00	225	130 % of	75 % of	10 % of	Approx.
12	30.00	400	nominal	nominal	nominal	
18	20.00	900				0.36W
24	15.00	1,600	voltage	voltage	voltage	0.0011
36	10.00	3,600				
48	7.50	6,400				

## Safety Approval Ratings

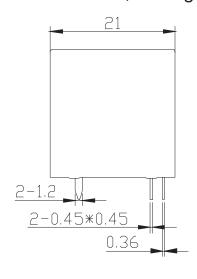
Approval	CQC	VDE	UL/CUL
File No.	CQC13002089151	40037165	E190598
Approved ratings	17A/10A 277VAC, NO/NC (CO)	10A 250VAC,NO 17A 250VAC,NO 17A/10A 250VAC, NO/NC CO	10A 277VAC,Resistive&General Use,NO 17A 277VAC,Resistive&General Use,NO 20A 125VAC,Resistive&General Use,NO 10A 277VAC,Resistive&General Use,NC TV-8 125VAC,NO 1HP 250VAC/125VAC, NO

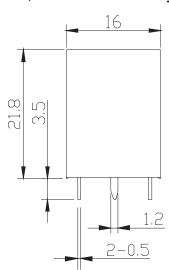
- (1) The above-mentioned unspecified temperature ratings, means that the ambient temperature is room temperature.
- (2) Only some typical ratings are listed above. Each rating's test condition is different, so the electrical endurance will be different. If more details are required, please contact us.
- (3) For sealed type testing, please open the ventilation hole of case before test.

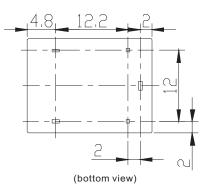
### **Ordering Information**



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





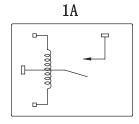


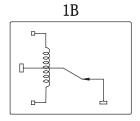
Unless otherwise specified:

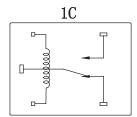
If dimension < 1mm, tolerance: 0.2mm; If dimension 1~5mm, tolerance: 0.3mm; If dimension > 5mm, tolerance: 0.4mm. Note: 1. Extended terminal dimension is

dimension before soldering.

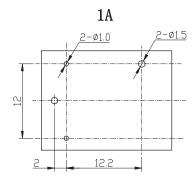
2. Tolerance of P.C.B. layout: 0 .1mm.

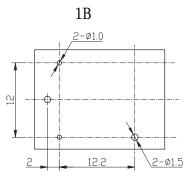


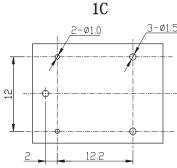




Wiring Diagram (bottom view)





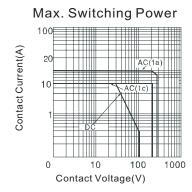


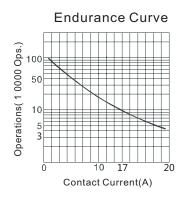
P.C.B. Layout (bottom view)

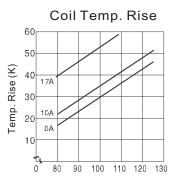
## **Typical Applications**

- Home appliances such as air conditonner, electrical heater, etc.
- Automat
- Office equipment such as computer ,fax machine,etc.
- Automatic power window ,car antenna,door lock,etc.

### Characteristic Curves







Percentage of Nominal Coil Voltage

#### 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. For sealed relays after installation and cleaning, please open the vent hole on the case before use. If there is any query, please contact Sanyou for the technica service. However it is the user's responsibility to determine which product should be used only.