

Miniature Power Relay

SRG-Series



Features

- High Contact Switching Capability:17 A
- Lower coil power and Price
- Microminiaturize; Standard PCB terminal
- Compliance with RoHS and the requirements for White Goods
- Satisfy IEC60335-1 product is available.
- 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 | 100MΩ 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 mm | | |
| | 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)

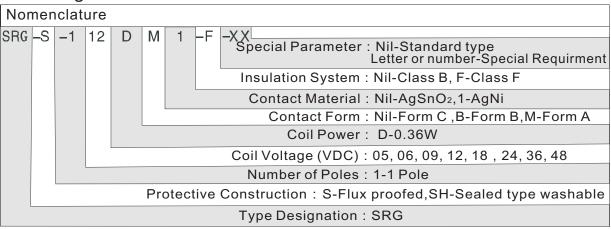
| Nominal voltage (VDC) | Nominal operating current ± 10% (mA) | Coil resistance ± 10% (Ω) | Max. allowable voltage | Pick-up voltage (Max.) | Drop-out voltage (Min.) | Nominal operating power |
|-----------------------------|--------------------------------------|---------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------|
| 5 | 72.00 | 69.5 | 130 % of nominal voltage | ominal nominal | 10 % of nominal voltage | |
| 6 | 60.00 | 100 | | | | |
| 9 | 40.00 | 225 | | | | Annroy |
| 12 | 30.00 | 400 | | | | Approx. |
| 18 | 20.00 | 900 | | | | 0.36W |
| 24 | 15.00 | 1,600 | | | | 0.00 |
| 36 | 10.00 | 3,600 | | | | |
| 48 | 7.50 | 6,400 | | | | |

Safety Approval Ratings

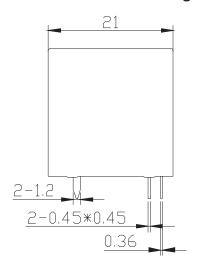
| Approval | CQC | VDE | UL/CUL | |
|------------------|-------------------------------|--|---|--|
| File No. | CQC13002089151 | 40037165 | E190598 | |
| Approved ratings | 17A/10A 277VAC, NO/NC (CO) | 10A 250VAC,NO 17A 250VAC,NO 17A/10A 250VAC, NO/NC CO | 10A 277VAC,Resistive&General Use,NO 17A 277VAC,Resistive&General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

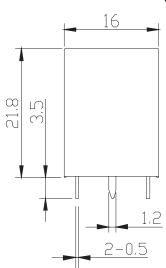
- (1) The above-mentioned unspecified temperature ratings, means that the ambient temperature is room temperature.
- (2) Only some typical ratings are listed above. Each rating's test condition is different, so the electrical endurance will be different. If more details are required, please contact us.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

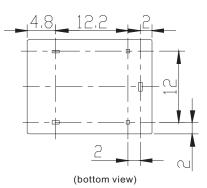
Ordering Information



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





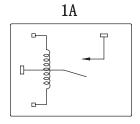


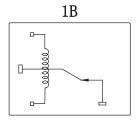
Unless otherwise specified:

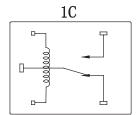
If dimension < 1mm, tolerance: 0.2mm; If dimension 1~5mm, tolerance: 0.3mm; If dimension > 5mm, tolerance: 0.4mm. Note: 1. Extended terminal dimension is

dimension before soldering.

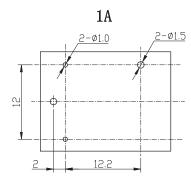
2. Tolerance of P.C.B. layout: 0.1mm.

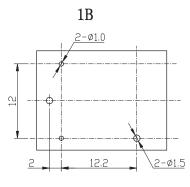


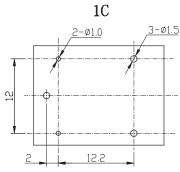




Wiring Diagram (bottom view)





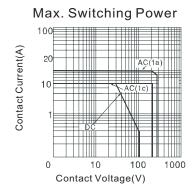


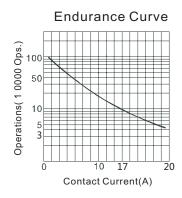
P.C.B. Layout (bottom view)

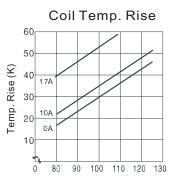
Typical Applications

- 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.