



Features

- Small size with high switching current 15A, especially suitable for automotive control box.
- Both single and dual relays available.
- Low price with excellent performance.
- Both sealed and open types available.

Contact Capacity

| Model | SARW–D/DM | SARW–DU/DW |
|--|-----------|------------|
| Nominal switching capacity (res. load) | 10A 14VDC | 15A 14VDC |
| Max. switching current | 10A | 15A |
| Max. switching voltage | 30VDC | 30VDC |
| Max. switching power | 140W | 210W |

Charateristic Data

| | | |
|---|---|---|
| Contact material | Silver alloy | |
| Initial contact resistance (at 6VDC 1A) | 50mΩ Max. | |
| Operate time (at nominal volt.) | 10msec. Max. | |
| Release time (at nominal volt.) | 5msec. Max. | |
| Initial insulation resistance | 100MΩ Min.(DC500V) | |
| Initial dielectric strength | Between open contacts: AC500V, 50/60Hz 1Min. | |
| | Between coil and contact: AC1,000V, 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 |
| | Electrical (at 900 ops./h) | 100,000 |
| Ambient temperature | –40°C ~ +125°C (no condensation) | |
| Unit weight | Open type: 8.0 g ; Sealed type: 10.0 g (single) ; 20.0 g (dual) | |

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 | 220.00 | 23 | 150 % of nominal voltage | 70 % of nominal voltage | 5 % of nominal voltage | Approx. 1.10W |
| 6 | 181.82 | 33 | | | | |
| 9 | 121.62 | 74 | | | | |
| 12 | 92.31 | 130 | | | | |
| 15 | 73.53 | 204 | | | | |
| 18 | 61.22 | 294 | | | | |
| 24 | 46.15 | 520 | | | | |

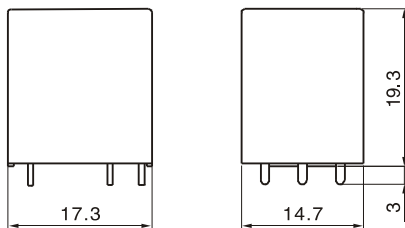
Ordering Information

| Nomenclature | | | | | |
|---|----|----|----|---|------|
| SARW | -S | -1 | 12 | D | M-XX |
| Special Parameter: Nil-Standard type, Letter or number-Special requirement | | | | | |
| Contact Form: Nil-1 Form C, M-1 Form A, W-2 Form C, U-2 Form A | | | | | |
| Coil Power: D-1.10W | | | | | |
| Coil Voltage (VDC): 05, 06, 09, 12, 15, 18, 24 | | | | | |
| Number of Poles: 1-Single relay, 2-Dual relays | | | | | |
| Protective Construction: Nil-Open type, S-Flux proofed, SH-Sealed type washable | | | | | |
| Type Designation: SARW | | | | | |

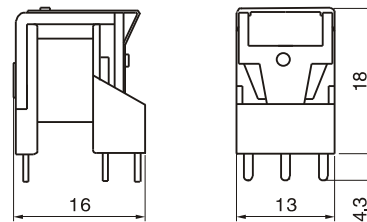
Outline Dimensions, Wiring Diagram, P.C. Board Layout (unit: mm)

SARW-1

Sealed type



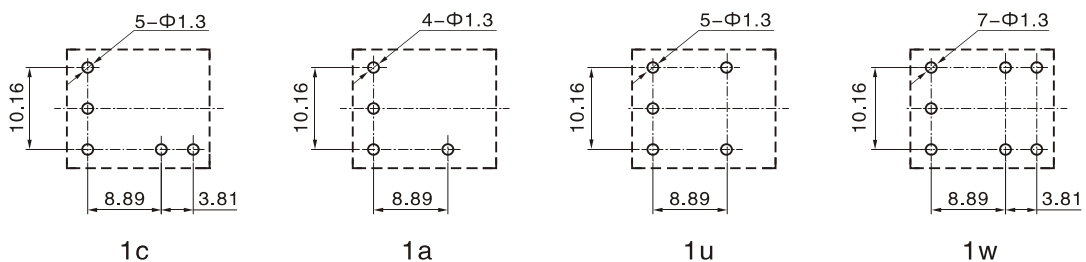
Open type



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.

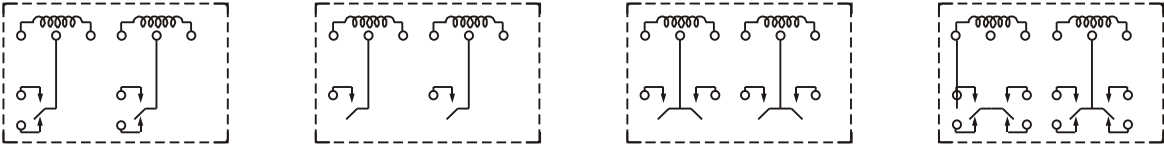
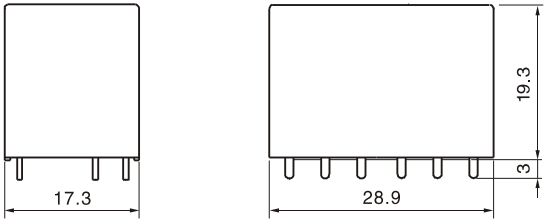


Wiring Diagram (bottom view)

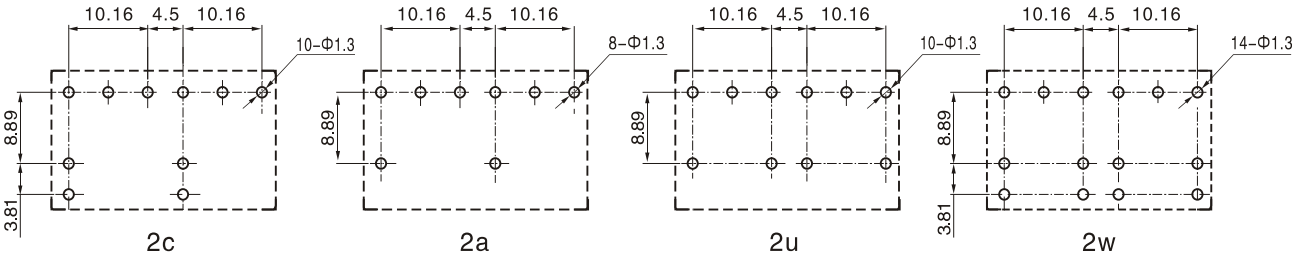


P.C.B. Layout (bottom view)

SARW-2



Wiring Diagram (bottom view)



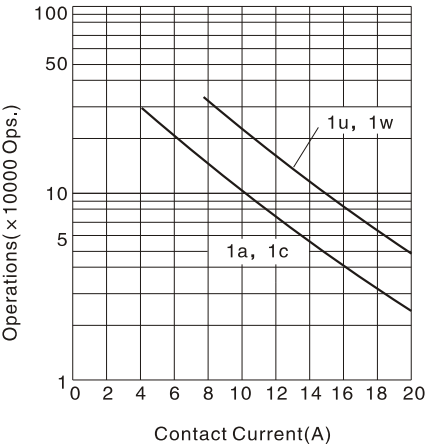
P.C.B. Layout (bottom view)

Typical Applications

- Car control switching box (warning system, automatic door lock system, etc), home appliances, instrument, etc.

Characteristic Curves

Endurance Curve



Coil Temp. Rise

