



Features

- Advanced DEC DQ1U technology and production line was introduced into from Japan.
- Small size (18.4x10.2x15.5mm) with 5A switching capability for high density PCB mounting.
- Surge voltage : 5000V (between coil and contact).
- Patent number : ZL 2008 20188817.6, ZL 2008 20188818.0

Safety Approval

UL , C - UL File No. : E190598

VDE File No. : 40002146

CQC File No. : CQC 02001002114

TUV File No. : R50142420

Contact Capacity

| Model | SJ-DM | SJ-LM |
|--|-----------|-----------|
| Nominal switching capacity (res. load) | 5A 250VAC | 3A 250VAC |
| Max. switching current | 5A | 3A |
| Max. switching voltage | 277VAC | 277VAC |
| Max. switching power | 1,250VA | 750VA |

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 | 1,000MΩ Min.(DC500V) | |
| Initial dielectric strength | Between open contacts : AC1,000V , 50/60Hz 1Min. | |
| | Between coil and contact :AC4,000V , 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 1,800 ops./h) | 100,000 |
| Ambient temperature | -40°C ~ +105°C (no condensation) | |
| Unit weight | Approx. 5.6 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 | 150.00 | 20 | 130 % of nominal voltage | 75 % of nominal voltage | 5 % of nominal voltage | .Approx 0.45W |
| 5 | 90.00 | 55 | | | | |
| 6 | 75.00 | 80 | | | | |
| 9 | 50.00 | 180 | | | | |
| 12 | 37.50 | 320 | | | | |
| 18 | 25.00 | 720 | | | | |
| 24 | 18.75 | 1,280 | | | | |

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 | 66.67 | 45 | 130 % of nominal voltage | 75 % of nominal voltage | 5 % of nominal voltage | Approx. 0.20W |
| 5 | 40.00 | 125 | | | | |
| 6 | 33.33 | 180 | | | | |
| 9 | 22.22 | 405 | | | | |
| 12 | 16.67 | 720 | | | | |
| 18 | 14.81 | 1,620 | | | | |
| 24 | 8.33 | 2,880 | | | | |

Safety Approval Ratings

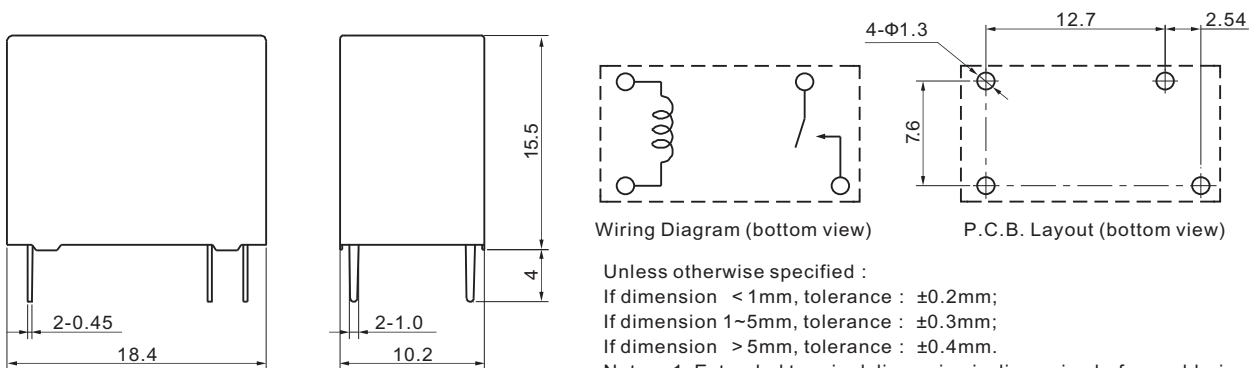
| Approval | CQC | TUV | VDE | UL/CUL |
|------------------|----------------------------|---------------------|---|---|
| File No. | CQC02001002114 | R50142420 | 40002146 | E190598 |
| Approved ratings | SJ-D & SJ-L : 5A 250VAC | SJ-D : 5A 250VAC | SJ-D : 5A 250VAC SJ-L : 3A 250VAC 5A 250VAC | SJ-D: 5A 277VAC, Resistive 5A 250VAC, Resistive&General Use 5A 28VDC, Resistive 1.5A 250VAC, General Use SJ-L: 3A 277VAC, Resistive 5A 120VAC, Resistive 3A 250VAC, Resistive&General use 3A 28VDC,, Resistive 1A 250VAC, General use |

Ordering Information

Nomenclature

| | | | | | | | | | |
|---|----|----|----|---|---|----|---|-----|--|
| SJ | -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 : Nil-AgSnO ₂ , 1-AgCdO 2-AgNi | | | | | | | | | |
| Contact Form : M-Form A | | | | | | | | | |
| Coil Power : D-0.45W, L-0.20W | | | | | | | | | |
| Coil Voltage (VDC) : 03, 05, 06, 09, 12, 18, 24 | | | | | | | | | |
| Number of Poles : 1-1 Pole | | | | | | | | | |
| Protective Construction : S-Flux proofed, SH-Sealed type washable | | | | | | | | | |
| Type Designation : SJ | | | | | | | | | |

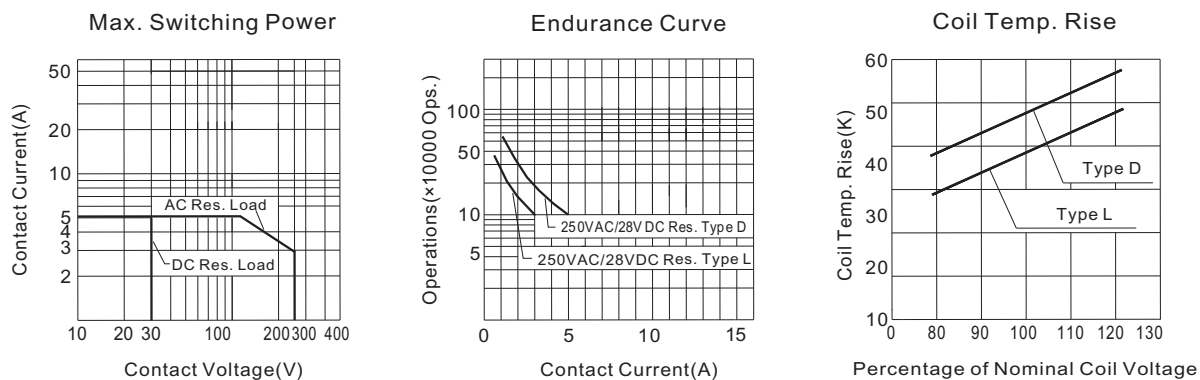
Outline Dimensions, Wiring Diagram, P.C. Board Layout (unit : mm)



Typical Applications

- Home appliances, office equipment, audio equipment, car, air conditioner, etc.

Characteristic Curves



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. If there is any query, please contact Sanyou for the technical service. However it is the user's responsibility to determine which product should be used only.