



- Miniature PCB power relay
- Up to 16A /28VDC or 230VAC
- Industry standard style
- Cost effective



RoHS Compliant ✓

| Contacts                         |                                |
|----------------------------------|--------------------------------|
| Contact arrangement              | SPST-NO (1 N/O), SPDT (1 C/O)  |
| Contact material                 | AgNi 90/10, AgSnO <sub>2</sub> |
| Max. switching voltage           | AC/DC 440VAC / 125VDC          |
| Max. switching power             | 4000VA                         |
| Min. switching current / voltage | 100mA/12VDC                    |
| Rated load                       | AC1 16A, 250VAC                |
|                                  | DC1 16A, 30VDC                 |
| Initial resistance               | 100mΩ, max. at 0.1A/6VDC       |

| Coil                              |                        |
|-----------------------------------|------------------------|
| Rated voltage                     | DC 5...110V            |
| Must release voltage              | DC ≥ 0.1U <sub>n</sub> |
| Operating range of supply voltage | See table 1            |
| Rated power consumption           | DC 400mW               |

| Insulation (EN 60664-1) |                                   |
|-------------------------|-----------------------------------|
| Insulation resistance   | AC ≤ 1000MΩ at 500VDC, 50%RH      |
| Dielectric strength     | coil to contact 5000Vrms, 1min    |
|                         | contact to contact 1000Vrms, 1min |

| General Data    |                            |
|-----------------|----------------------------|
| Operating time  | typ. ≤ 15ms                |
| Release time    | typ. ≤ 8ms                 |
| Electrical life | ops. ≥ 1 x 10 <sup>5</sup> |
| Mechanical life | ops. ≥ 1 x 10 <sup>7</sup> |

| Environmental        |                                  |
|----------------------|----------------------------------|
| Ambient temperature  | operating -40 to 85°C            |
|                      | storage -40 to 85°C              |
| Shock resistance     | functional 100m/s <sup>2</sup>   |
|                      | destructive 1000m/s <sup>2</sup> |
| Vibration resistance | DA 1.5mm 10-55Hz                 |
| Dimensions           | L x W x H 29 x 12.7 x 15.7mm     |
| Weight               | approx. 13.5g                    |

### Ordering Code

D X 8 5 - 3 0 1 1 - 3 5 - 1 0 0 9

Series

Coil code:

See table 1

Contact material

20: AgNi 90/10

30: AgSnO<sub>2</sub>

Contact arrangement

11: SPDT (1C/O)

21: SPST-NO (1N/O)

Environmental protection

2: In cover, flux tight - IP40

3: In cover, sealed - IP67

Mounting & terminations

5: For PCB

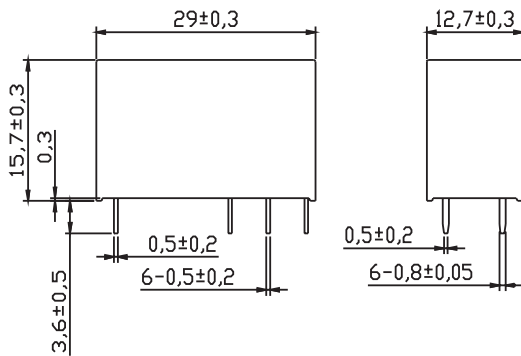
Coil Data (DC voltage 400mW)

Table 1

| Coil code | Nominal voltage (VDC) | Coil resistance (Ω) ±10% | Must operate voltage max. (VDC) | Must release voltage min. (VDC) |
|-----------|-----------------------|--------------------------|---------------------------------|---------------------------------|
| 1005      | 5                     | 62                       | 3.5                             | 0.5                             |
| 1006      | 6                     | 90                       | 4.2                             | 0.6                             |
| 1009      | 9                     | 202                      | 6.3                             | 0.9                             |
| 1012      | 12                    | 360                      | 8.4                             | 1.2                             |
| 1018      | 18                    | 810                      | 12.6                            | 1.8                             |
| 1024      | 24                    | 1440                     | 16.8                            | 2.4                             |
| 1048      | 48                    | 5760 ±15%                | 33.6                            | 4.8                             |
| 1060      | 60                    | 7500 ±15%                | 42.0                            | 6.0                             |
| 1110      | 110                   | 25200 ±15%               | 77.0                            | 11.0                            |

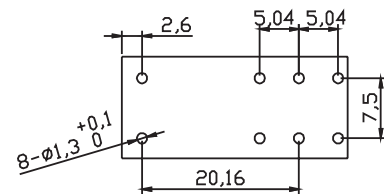
Dimensions mm

Fig. 1



PCB Mounting Dimensions mm (bottom view)

Fig. 2



Wiring Diagrams (bottom view)

Fig. 3

