

Miniature PCB Automotive Relay





#### Features

- Microminiature, standard PCB type.
- High vibration and shock resistance.
- Switching capability:20A, low power consumption:0.6W.

Safety Approval UL, TUV, CQC

# **Contact Capacity**

| Model                      | YA                  |  |  |  |  |
|----------------------------|---------------------|--|--|--|--|
| Nominal Switching Capacity | 20A 14VDC 5A 250VAC |  |  |  |  |
| Max.swithing current       | 20A                 |  |  |  |  |
| Max.swithing voltage       | 30VDC               |  |  |  |  |
| Max.swithing power         | 280W                |  |  |  |  |

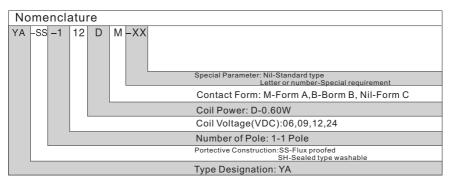
# Characteristic Data

| Contact material              | Silver alloy                                    |  |  |  |  |  |
|-------------------------------|---|--|--|--|--|--|
| Initial contact resistance    | 100mΩ Max.                                      |  |  |  |  |  |
| Operate time                  | 10msec. Max.                                    |  |  |  |  |  |
| Release time                  | 5msec. Max.                                     |  |  |  |  |  |
| Initial insulation resistance | 100MΩ Min.(DC500V)                              |  |  |  |  |  |
| Initial dielectric strength   | Between open contacts: AC500V,50/60HZ 1Min.     |  |  |  |  |  |
|                               | Between coil and contacts: AC500V,50/60HZ 1Min. |  |  |  |  |  |
| Vibration resistance          | Functional                                      | 10-55 $\operatorname{HZ}$ at double amplitude of 1.5mm |  |  |  |  |
|                               | Destructive                                     | 10-55 HZ at double amplitude of 1.5mm                  |  |  |  |  |
| Shock resistance              | Functional                                      | 10G Min.   |  |  |  |  |
|                               | Destructive                                     | 100G Min.  |  |  |  |  |
| Endurance(operations)         | Mechanical(at 10,800ps.h) 10,000,000 times      |  |  |  |  |  |
|                               | Electrical(at 10,800ps.h) 100,000 times         |  |  |  |  |  |
| Ambient temperature           | -40°C ~ +125°C( no condensation)                |  |  |  |  |  |
| Unit weight                   | Approx.6.0g                                     |  |  |  |  |  |

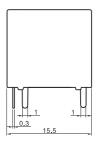
### Coil Data(at 20°C)

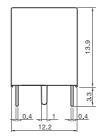
| Nominal<br>voltage<br>(VDC) | Nominal<br>operating current<br>± 10% (mA) | Coil resistance $\pm 10\% (\Omega)$ | Allowable<br>voltage<br>(Max.) | Pick-up<br>voltage<br>(Max.) | Drop-out<br>voltage<br>(Min.) | Nominal<br>operating<br>power |
|-----------------------------|--|-------------------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|
| 6                           | 100.00                                     | 60                                  |                                |                              |                               |                               |
| 9                           | 66.67                                      | 135                                 | 110%of<br>nominal              | 70%of<br>nominal             | 5%of<br>nominal               | 0.60W                         |
| 12                          | 50.00                                      | 240                                 | voltage                        | voltage                      | voltage                       |                               |
| 24                          | 25.00                                      | 960                                 |                                |                              |                               |                               |

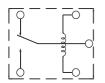
#### **Ordering Information**



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

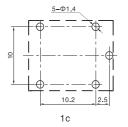


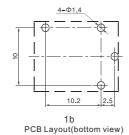




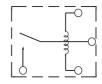


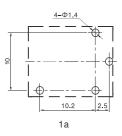
Wiring Diagram(bottom view)





Unless otherwise specified: <1mm,tolerance,±0.2mm; 1-5mm,tolerance,±0.3mm; >5mm,tolerance,±0.4mm; Note: 1. Extended terminal dimension is dimension before soldering. 2. Tolerance of PCB layout:±0.1mm





## **Typical Applications**

•Office equipment •Anti-theft systerm.

• Home appliances, auto door lock motor control.

### **Characteristic Curves**

