# SIP-HV Series High Voltage Reed Relays

High Voltage Reed Relay

## 1 Features

- Dielectric strength up to 4000VDC
- High-speed switching, high voltage up to 1500VDC
- High insulation resistance up to $10^{12}$ Ω
- Low contact resistance, long-life hermetically sealed contacts
- Optional built-in magnetic shield
- Compact size, RoHS compliant

## 2 Performance Data

| Parameter | Unit | SIP-HV1A□ |
|---|---|---|
| Contact rating | W | 100 |
| Max. switching voltage (Max DC/Peak AC) | V | 1500VDC/1000VAC |
| Max. switching current (Max DC/Peak AC) | A | 1.0 |
| Max. carry current | A | 2.5 |
| Contact resistance | mΩ | 150 |
| Dielectric strength | | |
| Between open contacts | V | 4000 |
| Between contacts and coil | V | 4000 |
| Insulation resistance | Ω | $10^{12}$ |
| Operate time | ms | 1.0 |
| Release time | ms | 0.25 |
| Vibration (0-2000 Hz) | G | 20 |
| Shock (11 ms, 1/2 sine wave) | G | 50 |
| Operating temperature | ℃ | -40~+85 |
| Storage temperature | ℃ | -40~+105 |
| Expected life | Ops | $5\times10^{8}$ (at 5VDC-10mA) |
| Dimensions | / | See dimension drawings |

## 3 Coil Data

| Model | Rated voltage (VDC) | Pick-up voltage (VDC) | Drop-out voltage (VDC) | Max. voltage (VDC) | Coil resistance |
|---|---|---|---|---|---|
| SIP-HV1A□ | 5 | 3.5 | 0.5 | 15 | 120 |
| SIP-HV1A□ | 12 | 9 | 1.2 | 35 | 500 |
| SIP-HV1A□ | 24 | 17 | 2.4 | 50 | 2000 |

Coil resistance unit: ±10% Ω at 20℃

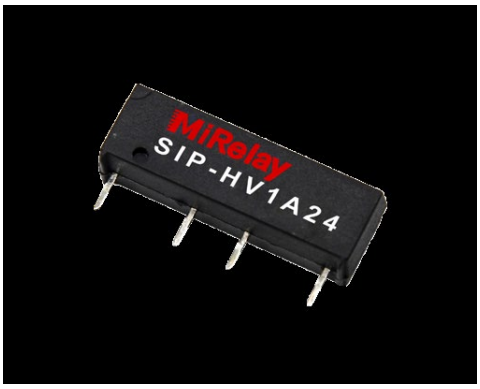
## 4 Part Number Code

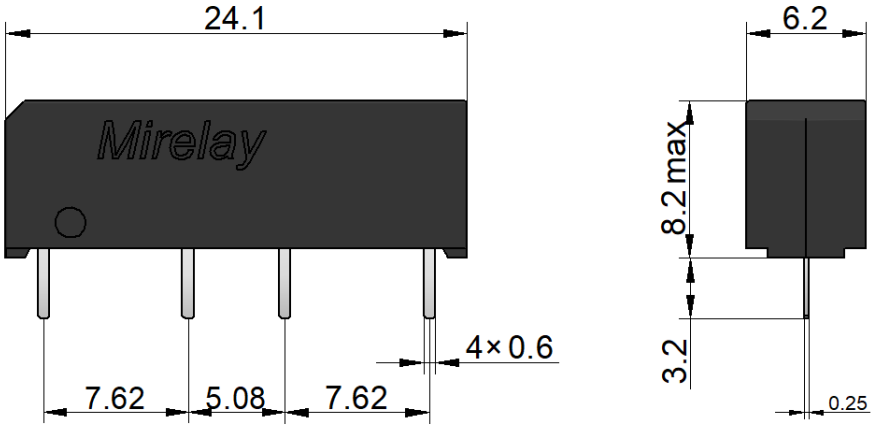
Code format: SIP-HV - □ □ □ -(XXX)

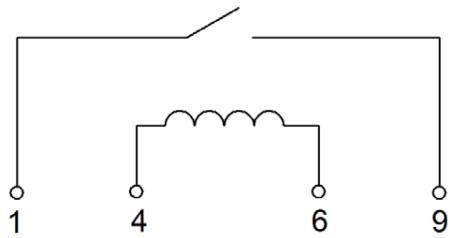
Positions: ① ② ③ ④ ⑤

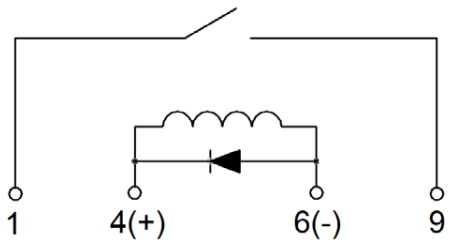
| Code | Item | Description |
|---|---|---|
| ① | **Series** | SIP-HV |
| ② | **Contact form** | 1A: 1 Form A |
| ③ | **Coil voltage** | 05: 5VDC, 12: 12VDC, 24: 24VDC |
| ④ | **Feature** | Blank: standard; D: with diode; DS: with diode and magnetic shield |
| ⑤ | **Special suffix** | Per customer requirements |

## 5 Dimensions & Wiring






## 6 Cautions for Use

- Do not install the relay where it is directly exposed to rain, in strong magnetic fields, or near objects with heat radiation.
- Switching inductive or capacitive loads may generate peak voltage or current; a protection circuit is recommended, otherwise the relay may be damaged.
- Avoid excessive packing density during use, as this may affect the electrical characteristics of the relay.
- Excessive mechanical shock may cause relay malfunction.
- For wave soldering: max. temperature 260℃, max. 5 s.

## 7 Disclaimer

This document is for customer reference only. Specifications are subject to change due to product improvements without prior notice. The final specifications of each product are subject to the Product Commitment and approved samples.
Performance requirements vary by application. Customers should select the appropriate product based on actual operating conditions. If in doubt, please contact us.



Address: 1007, Great Wall Building, 3000 Zhongshan North Road, Putuo District, Shanghai 200063
Tel: +86 13761571029 | Email: sales@reed-relay.com