

SIP-HV Series

High voltage Reed Relay

1 Feature

- ◆ Dielectric strength up to 4000 VDC
- ◆ High speed switch, high voltage up to 1000 VDC
- ◆ High Insulation resistance, up to $10^{12}\Omega$
- ◆ Low contact resistance, excellent lifetime characteristics
- ◆ Magnetic shield-reduces interaction
- ◆ Custom Design, conforming to Rohs directive



2 Performance Data

Parameter	Units	Value	
Relay Model	/	SIP-HV1A□	
Contact Rating	W	100	
Max.Switching Voltage (Max DC/Peak AC)	V	1000	
Max.Switching Current (Max DC/Peak AC)	A	1.0	
Max.Carry Current	at 60°C	A	2.5
Contact Resistance	mΩ	150	
Dielectric Strength (static)	Between contact	VDC	4000
	Contact/shield to coil	VDC	4000
Insulation Resistance	Ω	10^{12}	
Operate Time	ms	1.0	
Release Time	ms	0.25	
Vibration(0~2000Hz)	G	20	
Shock(11ms, 1/2 sine)	G	50	
Operating Temp	°C	-20~+70	
Storage Temp	°C	-35~+105	
Life Expectancy	Ops	5×10^8 (at 5VDC-10mA)	
Outline Dimensions	/	Reference outline drawing	

3 Coil Parameters

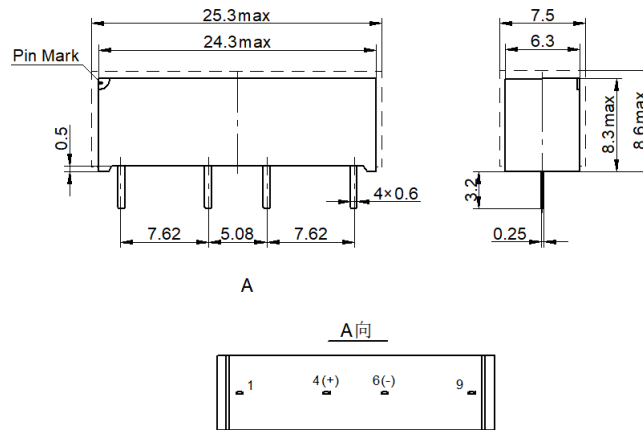
Model	Nominal Voltage (VDC)	Pickup Voltage Max.(VDC)	Dropout Voltage Min.(VDC)	Operate Voltage Max.(VDC)	Coil Resistance ($\pm 10\% \Omega$ at 20°C)
SIP-HV1A□	5	3.5	0.5	15	120
	12	9	1.2	35	500
	24	17	2.4	50	2000

4 Example of order marking

SIP-HV - - (XXX)
 ① ② ③ ④ ⑤

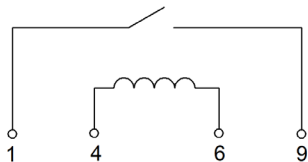
- 37 Product model: SIP-HV
- 38 Contact form: 1A: 1 Form A
- 39 Nominal coil voltage: 05: 5VDC、12: 12VDC、24: 24VDC
- 40 Features: Blank: Standard、D: With Diode、S: With magnetic shield、DS: With Diode and magnetic shield
- 41 Special code: Customer special requirement

5 Outline drawing

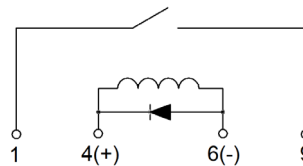


6 Wiring diagram

1) 无二极管



2) 有二极管



7 Precautions for use

- ※ Avoid installing relays where rain falls, or where there is a strong magnetic field, or near an object with thermal radiation.
- ※ Switching inductive or capacitive load systems will produce peak voltage or current, it is recommended to use protective circuit, otherwise, may cause relay damage.
- ※ Avoid excessive packing density in use which may affect the electrical characteristics of the relay.
- ※ Mechanical impact strength is too large, will cause the relay to use the fault.
- ※ When the relay is used for wave soldering, the maximum temperature is 260℃ and the time does not exceed 5s.

⚠Statement:

The document is for customer reference only. Specifications and parameters may be changed due to product improvement. For the specific parameters and performance of each product, please refer to the specifications and samples provided by Mirelay without further notice.

Relay performance parameters in different application areas are different, so customers should choose the appropriate products according to the specific conditions of use, if in doubt, please contact Shanghai MiRelay Electronics Co.,Ltd. for more technical support.

VSIP Series

Reed Relay

1 Feature

- ◆ Molded thermoset body on integral lead frame design
- ◆ Optional coil suppression diode protects coil drive circuits
- ◆ High Insulation resistance, up to $10^{12}\Omega$
- ◆ High speed switch,high reliability,long life sealed contact
- ◆ Magnetic shield-reduces interaction
- ◆ Custom Design, conforming to Rohs directive



2 Performance Data

Parameter	Units	Value	
Relay Model	/	VSIP-1A□	
Contact Rating	W	10	
Max.Switching Voltage (Max DC/Peak AC)	V	200	
Max.Switching Current (Max DC/Peak AC)	A	0.5	
Max.Carry Current	at 60°C	A	1.0
Contact Resistance	mΩ	150	
Dielectric Strength (static)	Between contact	VDC	150
	Contact/shield to coil	VDC	1400
Insulation Resistance	Ω	10^{12}	
Operate Time	ms	0.5	
Release Time	ms	0.1	
Vibration(0~2000Hz)	G	20	
Shock(11ms, 1/2 sine)	G	50	
Operating Temp	°C	-20~+70	
Storage Temp	°C	-35~+105	
Life Expectancy	Ops	5×10^7 (at 10VDC-10mA)	
Outline Dimensions	/	Reference outline drawing	

3 Coil Parameters

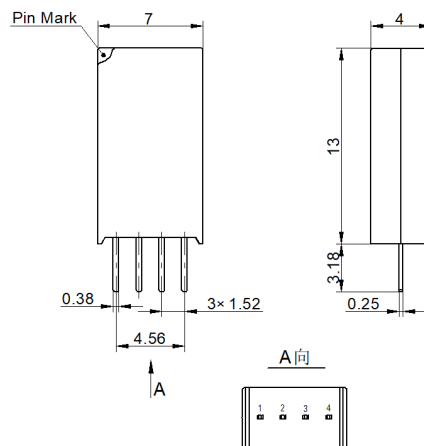
Model	Nominal Voltage (VDC)	Pickup Voltage Max.(VDC)	Dropout Voltage Min.(VDC)	Operate Voltage Max.(VDC)	Coil Resistance ($\pm 10\% \Omega$ at 20°C)
VSIP-1A□	5	4	0.4	10	500
	12	9	1	24	1000

4 Example of order marking

VSIP - - (XXX)
 ① ② ③ ④ ⑤

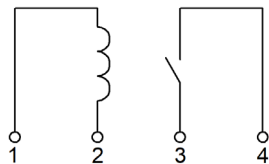
- 42 Product model: MSIP
- 43 Contact form: 1A: 1 Form A
- 44 Nominal coil voltage: 05: 5VDC、12: 12VDC、24: 24VDC
- 45 Pin type: 01、02
- 46 Special code: Customer special requirement

5 Outline drawing

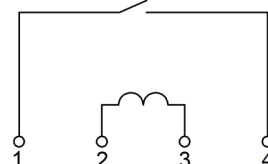


6 Wiring diagram

1) VSIP-1A□-01



2) VSIP-1A□-02



7 Precautions for use

- ※ Avoid installing relays where rain falls, or where there is a strong magnetic field, or near an object with thermal radiation.
- ※ Switching inductive or capacitive load systems will produce peak voltage or current, it is recommended to use protective circuit, otherwise, may cause relay damage.
- ※ Avoid excessive packing density in use which may affect the electrical characteristics of the relay.
- ※ Mechanical impact strength is too large, will cause the relay to use the fault.
- ※ When the relay is used for wave soldering, the maximum temperature is 260°C and the time does not exceed 5s.

⚠Statement:

The document is for customer reference only. Specifications and parameters may be changed due to product improvement. For the specific parameters and performance of each product, please refer to the specifications and samples provided by Mirelay without further notice.

Relay performance parameters in different application areas are different, so customers should choose the appropriate products according to the specific conditions of use, if in doubt, please contact Shanghai MiRelay Electronics Co.,Ltd. for more technical support.

MSIP Series**Reed Relay****1 Feature**

- ◆ Molded thermoset body on integral lead frame design
- ◆ Optional coil suppression diode protects coil drive circuits
- ◆ High Insulation resistance, up to $10^{12}\Omega$
- ◆ High speed switch,high reliability,long life sealed contact
- ◆ Magnetic shield-reduces interaction
- ◆ Custom Design, conforming to Rohs directive

**2 Performance Data**

Paramenter	Units	Value	
Relay Model	/	MSIP-1A□	
Contact Rating	W	10	
Max.Switching Voltage (Max DC/Peak AC)	V	250	
Max.Switching Current (Max DC/Peak AC)	A	0.5	
Max.Carry Current	at 60°C	A	1.0
Contact Resistance	mΩ	100	
Dielectric Strength (static)	Between contact	VDC	250
	Contact/shield to coil	V	1500
Insulation Resistance	Ω	10^{12}	
Operate Time	ms	0.5	
Release Time	ms	0.3	
Vibration(0~2000Hz)	G	20	
Shock(11ms, 1/2 sine)	G	50	
Operating Temp	°C	-20~+70	
Storage Temp	°C	-35~+105	
Life Expectancy	Ops	5×10^7 (at 10VDC-10mA)	
Outline Dimensions	/	Reference outline drawing	

3 Coil Parameters

Model	Nominal Voltage (VDC)	Pickup Voltage Max.(VDC)	Dropout Voltage Min.(VDC)	Operate Voltage Max.(VDC)	Coil Resistance ($\pm 10\% \Omega$ at 20°C)
MSIP-1A□	5	4	0.4	21	500
	12	9	1	30	1000

4 Example of order marking

MSIP □ - □ □ - (XXX)
 ① ② ③ ④ ⑤

47 Product model: MSIP

48 Contact form: 1A: 1 Form A

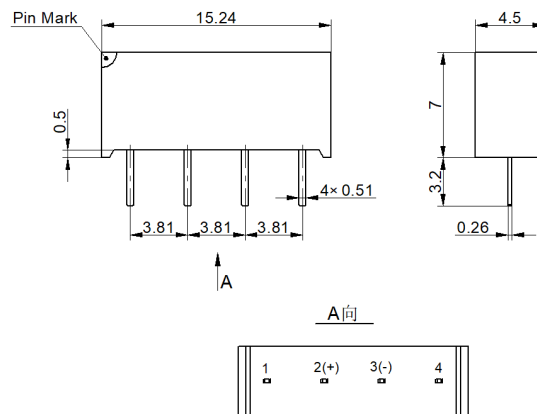
49 Nominal coil voltage: 05: 5VDC⁽¹⁾、12: 12VDC、24: 24VDC

50 Features: Blank: Standard、B: With Diode、S: With magnetic shield、BS: With Diode and magnetic shield

51 Special code: Customer special requirement

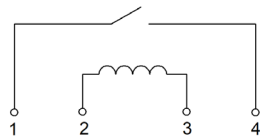
Note: (1) 5V DC is high resistance specification, suffix with “-HR”.

5 Outline drawing

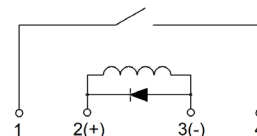


6 Wiring diagram

1)



2)



7 Precautions for use

- ※ Avoid installing relays where rain falls, or where there is a strong magnetic field, or near an object with thermal radiation.
- ※ Switching inductive or capacitive load systems will produce peak voltage or current, it is recommended to use protective circuit, otherwise, may cause relay damage.
- ※ Avoid excessive packing density in use which may affect the electrical characteristics of the relay.
- ※ Mechanical impact strength is too large, will cause the relay to use the fault.
- ※ When the relay is used for wave soldering, the maximum temperature is 260°C and the time does not exceed 5s.

⚠Statement:

The document is for customer reference only. Specifications and parameters may be changed due to product improvement. For the specific parameters and performance of each product, please refer to the specifications and samples provided by Mirelay without further notice.

Relay performance parameters in different application areas are different, so customers should choose the appropriate products according to the specific conditions of use, if in doubt, please contact Shanghai MiRelay Electronics Co.,Ltd. for more technical support.