HRX Series

High voltage Reed Relay

1 Feature

- ◆ High power reed relay with dielectric strength up to 15VDC
- ♦ High carry current
- lacktriangle High Insulation resistance, up to $10^{12}\Omega$
- ◆ Low contact resistance, excellent lifetime characteristics
- ◆ External magnetic and electrostatic shield
- ◆ Custom Design, conforming to Rohs directive



2 Performance Data

Paramenter		Units	Value		
Relay Model		/	HRX□-1A10	HRX□-1A15	
Contact Rating		W	50		
Max.Swiching Voltage (Max DC/Peak AC)		٧	7500	10000	
Max.Swiching Current (Max DC/Peak AC)		Α	3.0		
`Max.Carry Current		Α	5.0		
Contact Resistance		mΩ	150		
Dielectric	Between contact	V	10000	15000	
Strength	Contact/shield to coil	٧	15000		
(static)	Contacts to shield	٧	15000		
Insulation Resistance		Ω	1012		
Operate Time		ms	3.0		
Release Time		ms	1.5		
Vibration(0 \sim 2000Hz)		G	20		
Shock(11ms, 1/2 sine)		G	50		
Operating Temp		$^{\circ}$	-20∼+70		
Storage Temp		$^{\circ}$	-35∼+105		
Life Expectancy		Ops	5×10 ⁷ (at 500VDC-100mA)		
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 (±10% Ω at 20 $^{\circ}$ C)
HRX□-1A□	10	7.5	1	14	120
	12	9	1	16	200
	24	18	2	29	600

MIRELAY MISENSOR REALY

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4 Example of order marking

 $\begin{array}{c|cccc} \underline{\mathsf{HRX}} & \underline{\square} & - & \underline{\square} & \underline{\square} & \underline{\square} - \underline{(\mathsf{XXX})} \\ \hline 1 & 2 & 3 & 4 & 5 & 6 \end{array}$

1 Product model: HRX

2 Nominal coil voltage: 05: 5VDC 12: 12VDC 24: 24VDC

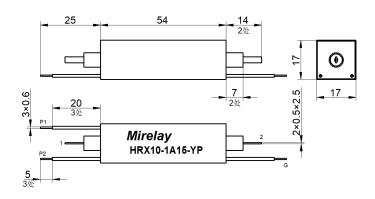
3 Contact form: 1A: 1 Form A

4 Breakdown voltage: 10: 10KV \ 15: 15KV

⑤ Features: Blank: Standard 、YP: Electrostatic shield

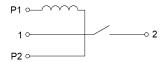
6 Special code: Customer special requirement

5 Outline drawing

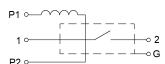


6 Wiring diagram

1) Standard



2) Electrostatic shield



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.
- st 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.

HVR Series(10KV&15KV&20KV)

High voltage Reed Relay

1 Feature

- ♦ High power reed relay with dielectric strength up to 20KV DC
- ♦ High carry current
- lacktriangle High Insulation resistance, up to $10^{12}\Omega$
- ◆ Low contact resistance, excellent lifetime characteristics
- ◆ Custom Design, conforming to Rohs directive



2 Performance Data

Paramenter		Units	Value			
Relay Model		/	HVR□-□10-□	HVR□-□15-□	HVR□-□20-□	
Contact Rating		W	50			
Max.Swiching Voltage (Max DC/Peak AC)		V	7500 10000			
Max.Swiching Current (Max DC/Peak AC)		Α	3.0			
Max.Carry Current at 60°C		Α	5.0			
Contact Resistance		mΩ	150		200	
Dielectric	Between contact		V	10000	15000	20000
Strength (static)	Contac	Contact/shield to coil		15000		20000
	Contac	cts to shield	V	15000		20000
Insulation Resistance		Ω	1012			
Operate Time		ms	3.0			
Release Time		ms	1.5			
Vibration(0 \sim 2000Hz)		G	20			
Shock(11ms, 1/2 sine)		G	50			
Operating Temp		$^{\circ}$	-20∼+70			
Storage Temp		$^{\circ}$	-35∼+105			
Life Expectancy		Ops	5×10 ⁷ (at 500VDC-100mA)			
Outline Dimensions		/	Reference outline drawing			

3 Coil Parameters

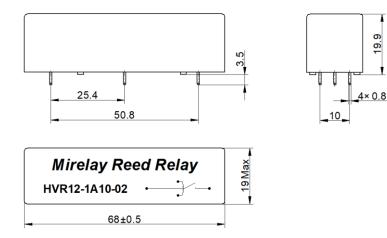
Model	Nominal Voltage (VDC)	Pickup Voltage Max.(VDC)	Dropout Voltage Min.(VDC)	Operate Voltage Max.(VDC)	Coil Resistance (±10%Ω at 20°C)
	5	4	0.5	7	30
HVR□-□□	12	9	1	16	200
	24	18	2	29	600

4 Example of order marking

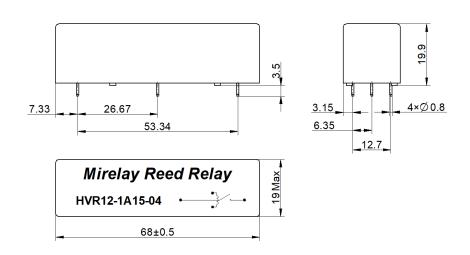
- 1 Product model: HVR
- 2 Nominal coil voltage: 05: 5VDC 12: 12VDC 24: 24VDC
- 3 Contact form: 1A: 1 Form A, 1B: 1 Form B
- 4 Breakdown voltage: 10: 10KV \ 15: 15KV \ 20: 20KV
- ⑤ Pin type: 02、04、06、150、156
- 6 Special code: Customer special requirement

5 Outline drawing

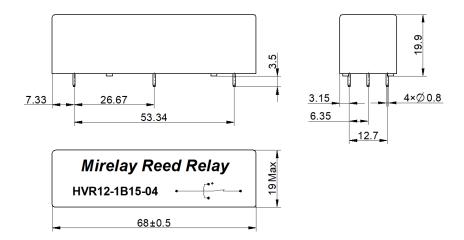
1) HVR□-1A□-02



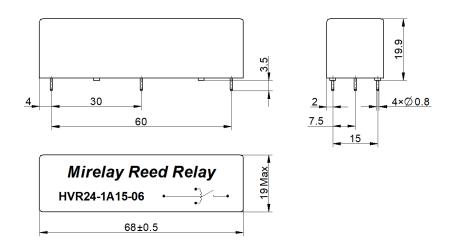
2) HVR□-1A□-04



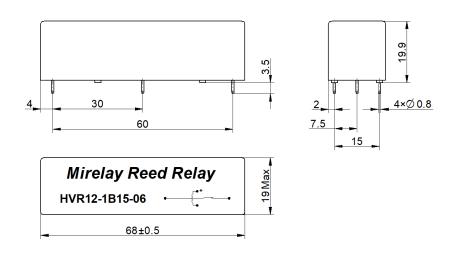
3) HVR□-1B□-04



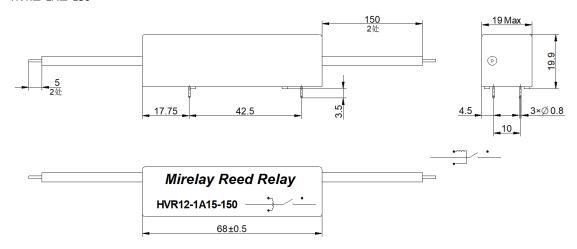
4) HVR□-1A□-06



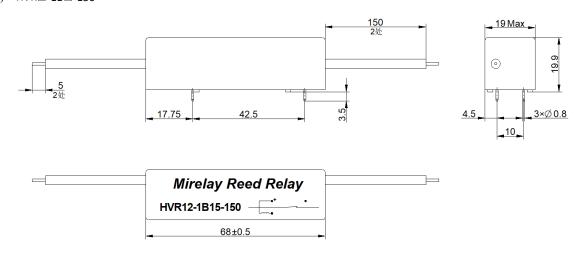
5) HVR□-1B□-06



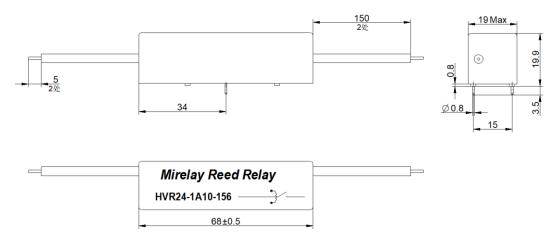
6) HVR□-1A□-150



7) HVR□-1B□-150

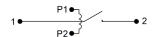


8) HVR□-1A□-156

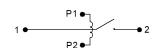


6 接线图

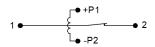
1) HVR□-1A□-02



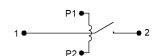
2) HVR□-1A□-04



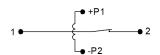
3) HVR□-1B□-04



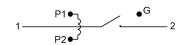
4) HVR□-1A□-06



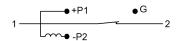
5) HVR□-1B□-06



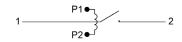
6) HVR□-1A□-150



7) HVR□-1B□-150



8) HVR□-1A□-156



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