

HVR Series High Voltage Reed Relays

High Voltage Reed Relay

1 Features

- ◆ High power reed relays
- ◆ High carry current capability
- ◆ High insulation resistance, up to $10^{12}\Omega$
- ◆ Low contact resistance, long-life hermetically sealed contacts
- ◆ Custom designs available, RoHS compliant

2 Performance Data

Parameter	Unit	HVR1A□	HVR1B□	HVR1A□ -02	HVR1B□ -02	HVR1A□ -03
Contact rating	W	100	100	100	100	
Max. switching voltage (Max DC/Peak AC)	V	1000	1000	1000	1000	
Max. switching current (Max DC/Peak AC)	A	1.0	1.0	1.0	1.0	
Max. carry current	A	2.5	2.5	2.5	2.5	
Contact resistance	mΩ	150	150	150	150	
Dielectric strength						
Between open contacts	V	4000	4000	3000□4500	3000□4500	
Between contacts and coil	V	4000	4000	7000	7000	
Insulation resistance	Ω	10^{12}	10^{12}	10^{12}	10^{12}	10^{12}
Operate time	ms	1.0	1.0	1.0	1.0	1.0
Release time	ms	0.1(1A) / 0.25(1B)	0.1(1A) / 0.25(1B)	0.1(1A) / 0.25(1B)	0.1(1A) / 0.25(1B)	0.1(1A) / 0.25(1B)
Vibration (0~2000Hz)	G	20	20	20	20	20
Shock (11 ms, 1/2 sine wave)	G	50	50	50	50	50
Operating temperature	°C	-20~+70	-20~+70	-20~+70	-20~+70	-20~+70
Storage temperature	°C	-35~+105	-35~+105	-35~+105	-35~+105	-35~+105
Expected life	Ops	5×10^7 (at 500V DC-100mA)	5×10^7 (at 500V DC-100mA)	5×10^7 (at 500V DC-100mA)	5×10^7 (at 500V DC-100mA)	5×10^7 (at 500V DC-100mA)
Dimensions	/	See dimension drawings	See dimension drawings	See dimension drawings	See dimension drawings	See dimension drawings

3 Coil Data

Model	Rated voltage (VDC)	Pick-up voltage (VDC)	Drop-out voltage (VDC)	Max. voltage (VDC)	Coil resistance
HVR1A□	5	4	0.5	7	100

Model	Rated voltage (VDC)	Pick-up voltage (VDC)	Drop-out voltage (VDC)	Max. voltage (VDC)	Coil resistance
HVR1A□	12	9	1	16	620
HVR1A□	24	18	2	29	1400
HVR1B□	5	4	0.5	7	120
HVR1B□	12	9	1	16	250
HVR1B□	24	18	2	29	1600
HVR1A□-02	5	4	0.5	7	100
HVR1A□-02	12	9	1	16	380
HVR1B□-02	24	18	2	29	1400
HVR1A□-03	5	3.5	0.5	7	80
HVR1A□-03	12	8.4	1.2	16	470
HVR1A□-03	24	16.8	2.4	29	1400

Coil resistance unit: $\pm 10\%$ Ω at 20°C

4 Part Number Code

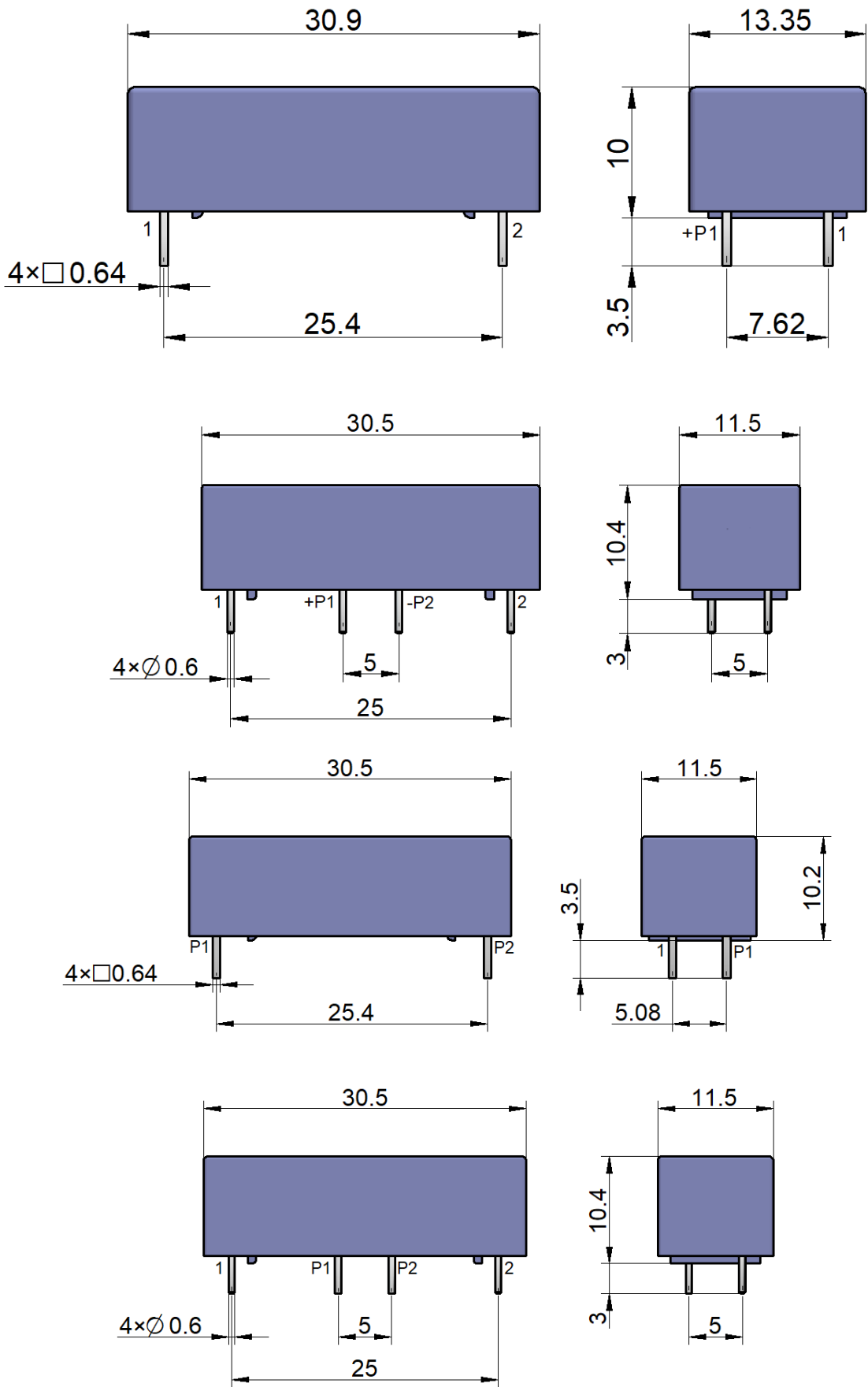
Code format: HVR □ □ □ - (XXX)

Positions: ① ② ③ ④ ⑤

Code	Item	Description
①	Series	HVR
②	Contact form	1A: 1 Form A, 1B: 1 Form B
③	Coil voltage	05: 5VDC, 12: 12VDC, 24: 24VDC
④	Type	02, 03
⑤	Special characteristic number	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°C, 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.

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