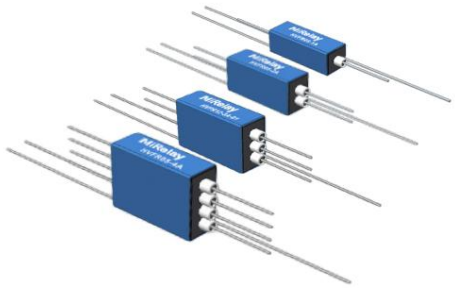
HVFR series

High voltage Reed Relay

1 Product Features

- High power reed relay, dielectric strength up to 4000VDC
- High load current capability
- High insulation resistance, up to 1013ÿ
- Low contact resistance, long life sealed contacts
- External magnetic and electrostatic shielding
- Customized design, in line with ROHS directive



2 Performance parameters

project		unit	value
Relay model		/	HVFRÿ-ÿ
Contact rating		In	100
Maximum switching voltage (Max DC/Peak AC)		IN	1000
Maximum switching current (Max DC/Peak AC)		A	1.0
Maximum load current		A	2.5
Contact resistance		mÿ	120
Dielectric withstand voltage	between break contacts	IN	4000
	Between contact and coil	IN	4000
	Contact and Shield Housing V		4000
Insulation resistance		Oh	1013
Pull-in time		ms	1.0
release time		ms	1.0
Vibration (0ÿ2000Hz) Shock		G	20
(11ms, 1/2 sine wave)		G	50
Operating temperature		ÿ	-20ÿ+70
Storage temperature		ÿ	-35ÿ+105
life expectancy		Ops	5×107(at 500VDC-100mA)
Dimensions		/	See each dimension drawing

3 coil parameters

model	Rated voltage (VDC)	operating voltage (VDC)	release voltage (VDC)	maximum voltage (VDC)	coil resistance (±10%ÿ at 20ÿ)
HVFRÿ-1A HVFRÿ-2A	5	4	0.5	6.5	100
	12	9	1	16	400
	24	18	2	29	1600

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model	Rated voltage (VDC)	Operating voltage (VDC)	release voltage (VDC)	maximum voltage (VDC)	Coil resistance (±10%ÿ at 20ÿ)
HVFRÿ-3A	12	9	1	16	400
	24	18	2	29	1200
HVFRÿ-4A	12	9	1	16	300
	24	18	2	29	1200

4 Example of type designation

HVFR ÿ - ÿ ÿ-(XXX) ÿ ÿ ÿ ÿ ÿ

ÿ Product model: HVFR

ÿ Coil voltage: 05: 5VDC, 12: 12VDC, 24: 24VDC

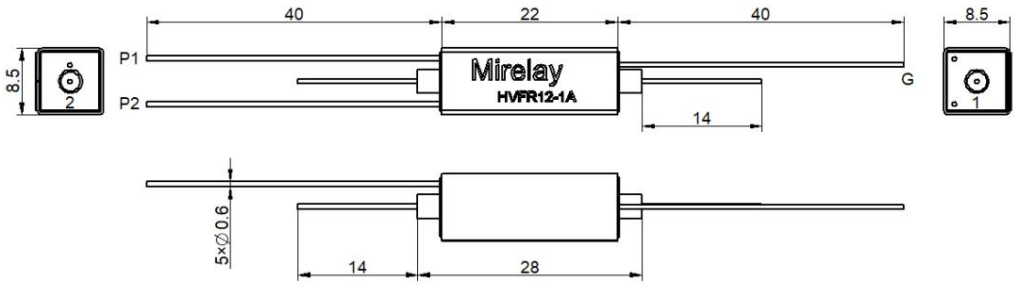
ÿ Contact form: 1A: one group of normally open, 2A: two groups of normally open, 3A: three groups of normally open, 4A: four groups of normally open

ÿ Installation form: None: Vertical installation, 01: Flat installation

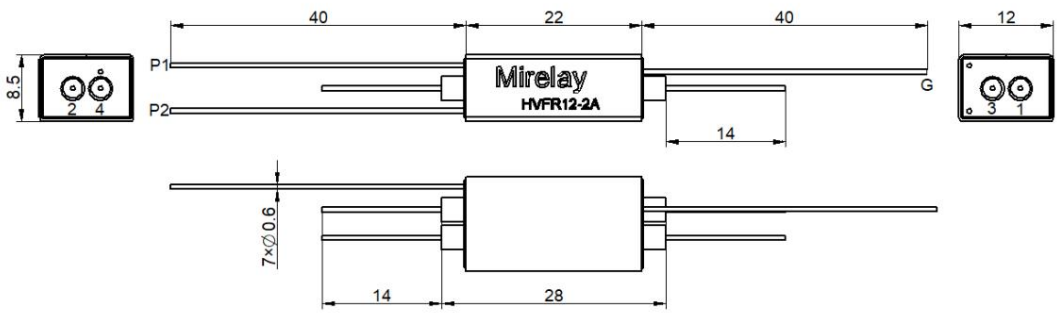
ÿ Special feature number: subject to customer needs

5 Dimensions

1) HVFRÿ-1A



2) HVFRÿ-2A



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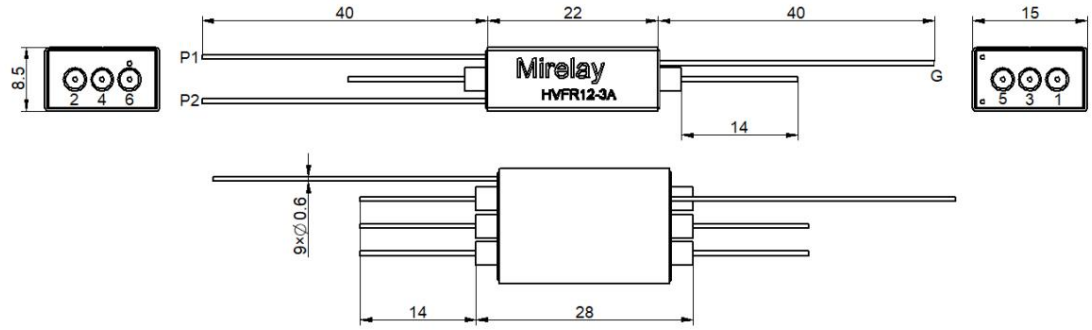
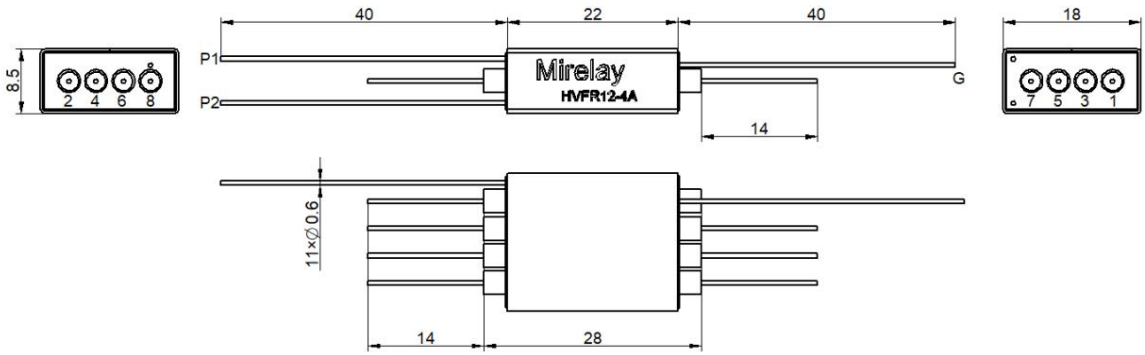
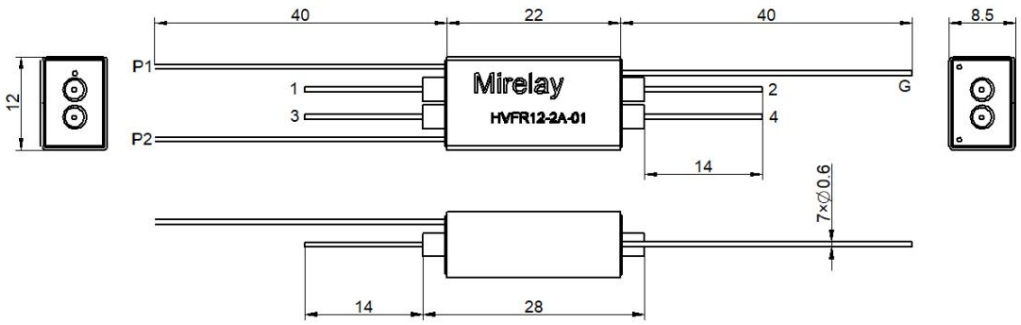
3) HVFRÿ-3A



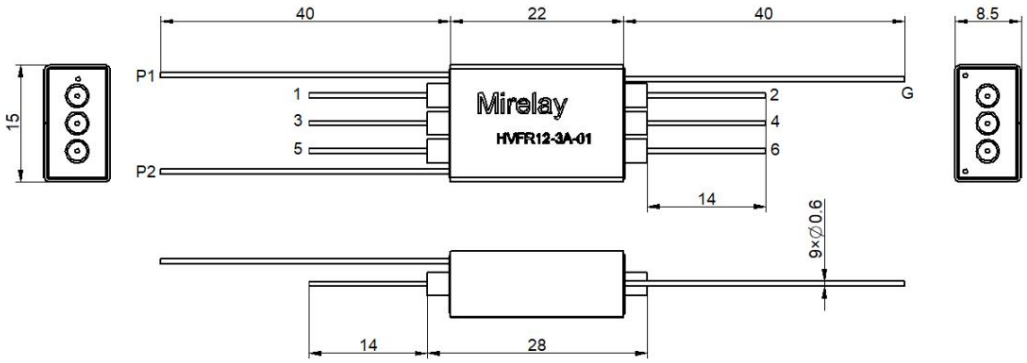
4) HVFRÿ-4A



5) HVFRÿ-2A-01



6) HVFRÿ-3A-01



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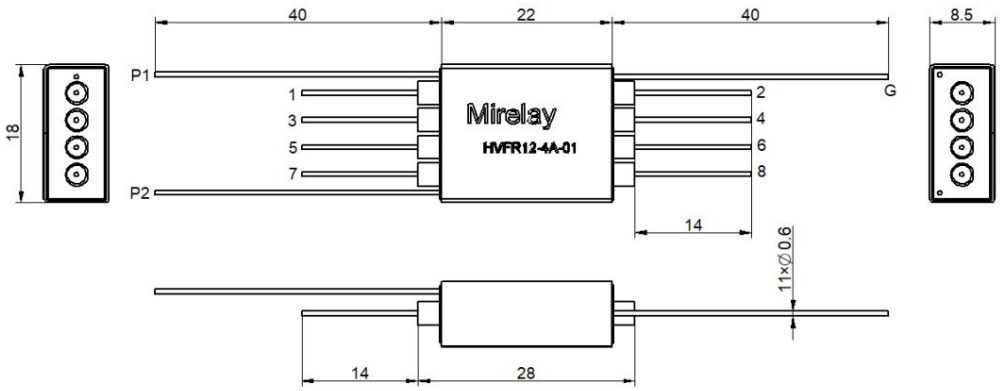
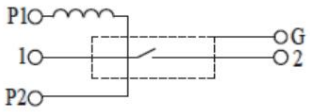
7) HVFRÿ-4A-01

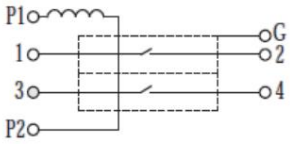


6 Wiring Diagram

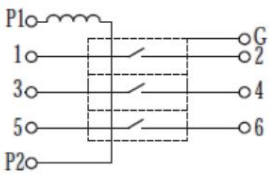
1) HVFRÿ-1A



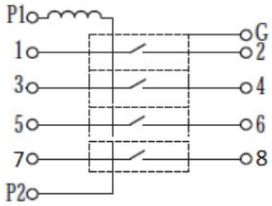
2) HVFRÿ-2AÿHVFRÿ-2A-01



3) HVFRÿ-3AÿHVFRÿ-3A-01



4) HVFRÿ-4AÿHVFRÿ-4A-01



7 Precautions for use ÿ Avoid

installing the relay in places directly exposed to rain, or places with strong magnetic fields, or close to objects with heat radiation. ÿ Switching inductive load or capacitive load system will generate peak voltage or current, it is recommended to use a protection circuit, otherwise, the relay may be damaged. ÿ Avoid excessive bulk density in use, which may affect the electrical characteristics of the relay. ÿ If the mechanical impact strength is too large, it will cause the failure of the relay. ÿ When the relay is used for wave soldering, the maximum temperature is 260°C, and the time does not exceed 5s.

⚠ statement:

This information is for customers' reference only, and the specification parameters may change due to product improvement, etc. Each product involved is subject to the "Product Commitment Letter" and samples without prior notice. The performance parameter requirements of relays in different application fields are different, so customers should choose the appropriate product according to the specific use conditions. If you have any questions, please contact Shanghai Migaoli Electronics Co., Ltd. for more technical support.