# HFE26

# **MINIATURE HIGH POWER LATCHING RELAY**



### Features

- 25A, 40A switching capability
- Latching relay
- Manual switch function available
- Creepage distance: 8mm
- Dielectric strength: more than 4kV (between coil and contacts)
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (38.8 x 15.0 x 28.7)mm

CONTACT DATA	
Contact arrangement	1A, 1C
Contact resistence	2mΩ max. (at 1A 24VDC)
Contact material	AgSnO <sub>2</sub>
Contact rating (Res. load)	1C: 25A 250VAC 1A: 40A 250VAC
Max. switching voltage	250VAC
Max. switching current	40A
Max. switching power	10000VA
Max. continuous current	40A
Mechanical endurance	1 x 10 <sup>6</sup> ops
Electrical endurance	3 x 10 <sup>4</sup> ops

CHARACTERISTICS				
Insulation resistance		1000MΩ (at 500VDC)		
Dielectric Betwee	n coil & contacts	4000VAC 1min		
strength Betwee	n open contacts	1500VAC 1min		
Creepage distance (input to output)		8mm		
Operate time (at nomi. volt.)		10ms max.		
Release time (at nomi. volt.)		10ms max.		
Shock resistance	Functional	98m/s²		
	Destructive	980m/s <sup>2</sup>		
Vibration resistance		10Hz to 55Hz 1.5mm DA		
Humidity		5% to 85% RH		
Ambient temperature		-40°C to 70°C		
Storage temperature		-40°C to 100°C		
Termination		PCB & QC		
Unit weight		Approx. 36g		
Construction		Dust protected		

Notes: The data shown above are initial values.

# COIL

Coil power

25A: Single coil latching: Approx. 1.0W Double coils latching: Approx. 2.0W 40A: Single coil latching: Approx. 1.5W Double coils latching: Approx. 3.0W

### **COIL DATA**

at 23°C

25A

25A					
Nominal Voltage VDC	Set / Reset Voltage VDC max.	Pulse Duration ms min.		Coil Resistance x (1±10%) Ω	
5	4	50	Single coil latching	25	
6	4.8	50		36	
9	7.2	50		81	
12	9.6	50		144	
15	12	50		225	
24	19.2	50		576	
48	38.4	50		2304	
5	4	50		12.5+12.5	
6	4.8	50		18+18	
9	7.2	50	Double coils latching	41+41	
12	9.6	50		72+72	
15	12	50		113+113	
24	19.2	50		288+288	
48	38.4	50		1152+1152	

#### **NOTICE**

- Relay is on the "reset" or "set" status when being released from stock, with the consideration of shock risen from transit and relay mounting, relay would be changed to "set" or "reset" status, therefore, when application (connecting the power supply), please reset the relay to "set" or "reset" status on request
- 2. In order to maintain "set" or "reset" status, energized voltage to coil should reach the rated voltage, impulse width should be 5 times more than "set" or "reset" time. Do not energize voltage to "set" coil and "reset" coil simultaneously. And also long energized time (more than 1 min) should be avoided.

**COIL DATA** at 23°C

40A

Nominal Voltage VDC	Set / Reset Voltage VDC max.	Pulse Duration ms min.	Coil Res			
5	4	50	Single coil latching	16.8		
6	4.8	50		24		
9	7.2	50		54		
12	9.6	50		96		
15	12	50		150		
24	19.2	50		384		
48	38.4	50		1536		

40A

-	40A						
	Nominal Voltage VDC	Set / Reset Voltage VDC max.	Pulse Duration ms min.	Coil Res			
	5	4	50		8.4+8.4		
	6	4.8	50	Double coils latching	12+12		
	9	7.2	50		27+27		
	12	9.6	50		48+48		
	15	12	50		75+75		
	24	19.2	50		192+192		
	48	38.4	50		768+768		

## **ORDERING INFORMATION**

-L2 -1 -R (XXX) 12 HFE26 -40/ **-**Z Α

**Type** 

**Contact rating 40**: 40A 25: 25A

Coil voltage 5, 6, 9, 12, 15, 24, 48VDC

H: 1 Form A (Only for 40A) **Contact form** Z: 1 Form C (Only for 25A)

**Manual switch** A: With manual switch B: No manual switch

Contact material T: AgSnO<sub>2</sub>

Sort L2: Double coils latching L1: Single coil latching

Layout of the coil pin ( for details please check the outline dimensions)

1: In parallel with the relay's longer edge 2: In parallel with the relay's shorter edge

Nil: Positive polarity **Polarity** R: Negative polarity

Special code<sup>1)</sup> **XXX:** Customer special requirement Nil: Standard

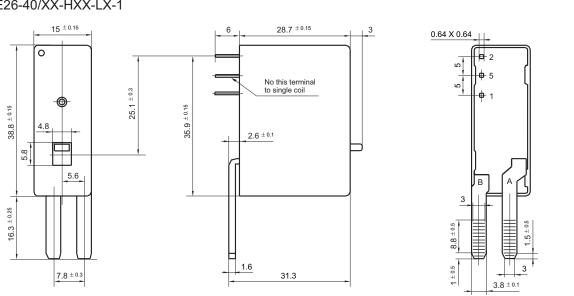
Notes: 1) The customer special requirement express as special code after evaluating by Hongfa.

### **OUTLINE DIMENSIONS AND WIRING DIAGRAM**

Unit: mm

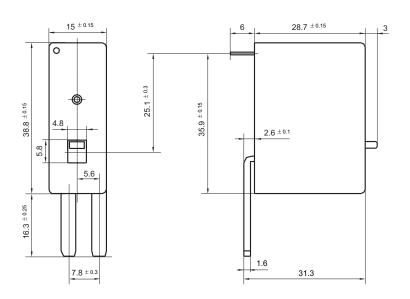
HFE26-40/XX-HXX-LX-1

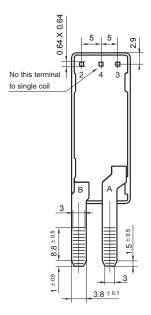
**Outline Dimensions** 



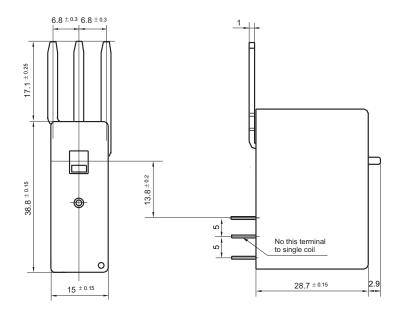
## **Outline Dimensions**

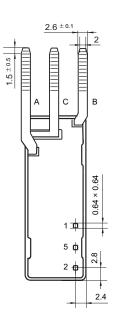
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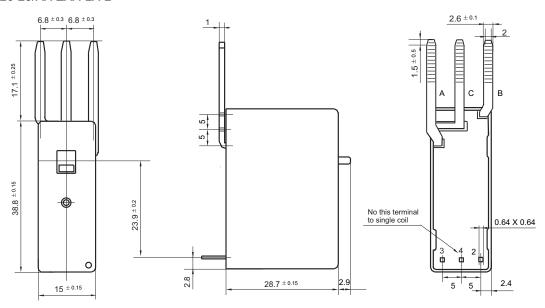


### HFE26-25/XX-ZXX-LX-1





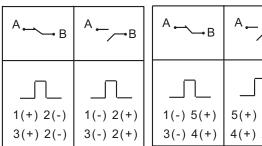
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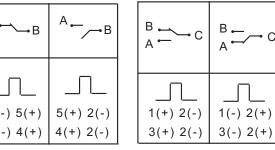


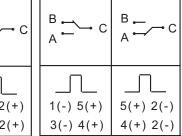
Wiring Diagram

### Positive polarity

Single coil latching, 1 Form A Double coils latching, 1 Form A Single coil latching, 1 Form Z Double coils latching, 1 Form Z





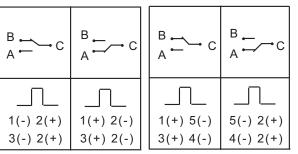


### Negative polarity

Single coil latching, 1 Form A Double coils latching, 1 Form A

A ← → B	A		A ↓ B	AB
1(-) 2(+) 3(-) 2(+)	1(+) 2(-) 3(+) 2(-)		1(+) 5(-) 3(+) 4(-)	5(-) 2(+) 4(-) 2(+)

Single coil latching.	1 Form Z	Double coils latching,	1 Form Z



#### Disclaimer

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.

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