

# 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 resistance	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 strength	Between coil & contacts	4000VAC 1min
	Between 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/s <sup>2</sup>
	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

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	Double coils latching	12.5+12.5
6	4.8	50		18+18
9	7.2	50		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

1. 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.



HONGFA RELAY

ISO9001, ISO/TS16949, ISO14001, OHSAS18001, IECQ QC 080000 CERTIFIED

2013 Rev. 1.00

## COIL DATA

at 23°C

40A

Nominal Voltage VDC	Set / Reset Voltage VDC max.	Pulse Duration ms min.	Coil Resistance x (1±10%) Ω	
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

Nominal Voltage VDC	Set / Reset Voltage VDC max.	Pulse Duration ms min.	Coil Resistance x (1±10%) Ω	
5	4	50	Double coils latching	8.4+8.4
6	4.8	50		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

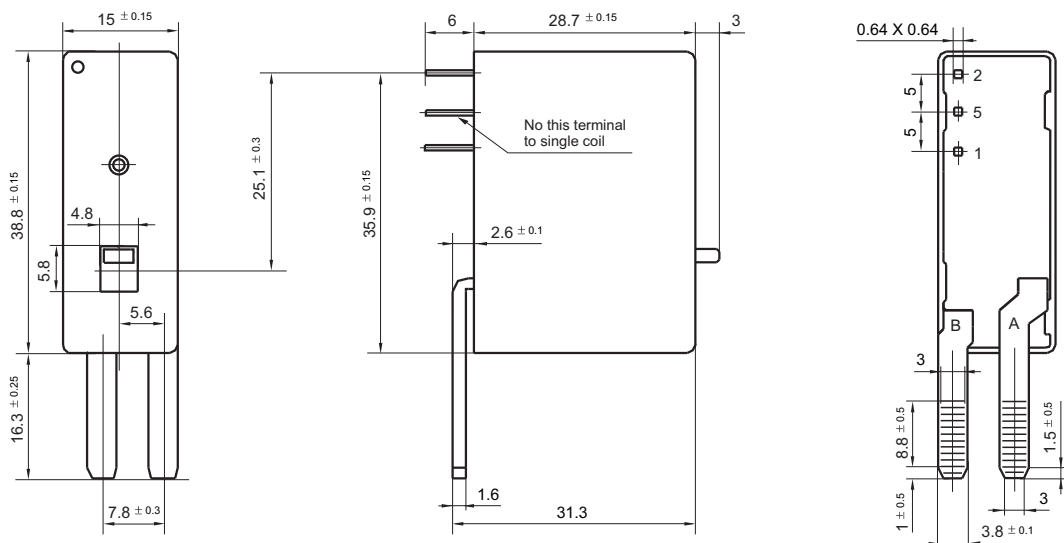
Type	HFE26 -40/ 12 -Z A T -L2 -1 -R (XXX)		
Contact rating	40: 40A	25: 25A	
Coil voltage	5, 6, 9, 12, 15, 24, 48VDC		
Contact form	H: 1 Form A (Only for 40A) Z: 1 Form C (Only for 25A)		
Manual switch	A: With manual switch B: No manual switch		
Contact material	T: AgSnO <sub>2</sub>		
Sort	L1: Single coil latching		L2: Double coils 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		
Polarity	R: Negative polarity		Nil: Positive polarity
Customer special code			

## OUTLINE DIMENSIONS AND WIRING DIAGRAM

Unit: mm

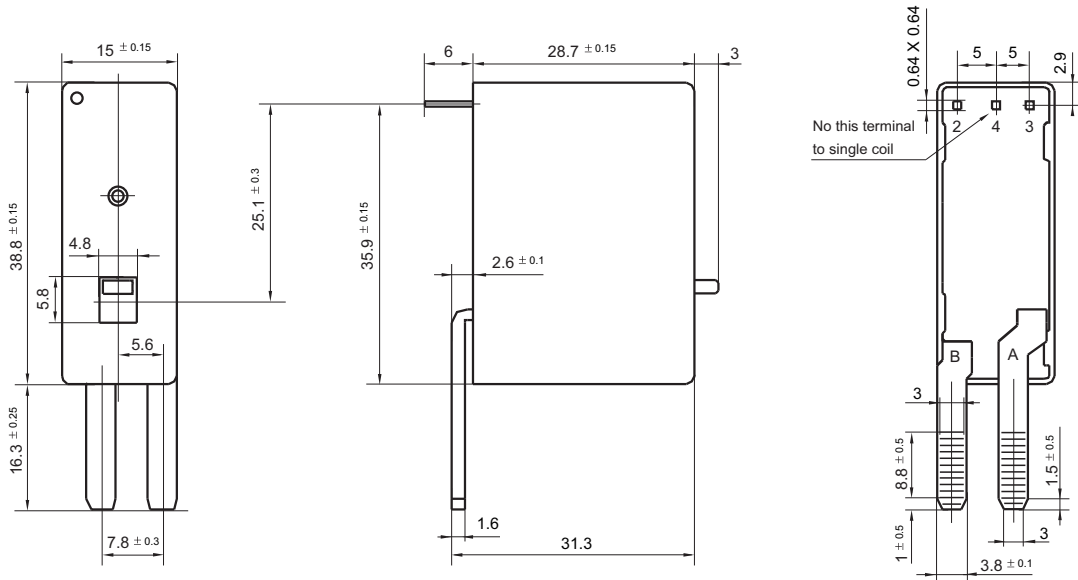
HFE26-40/XX-HXX-LX-1

### Outline Dimensions

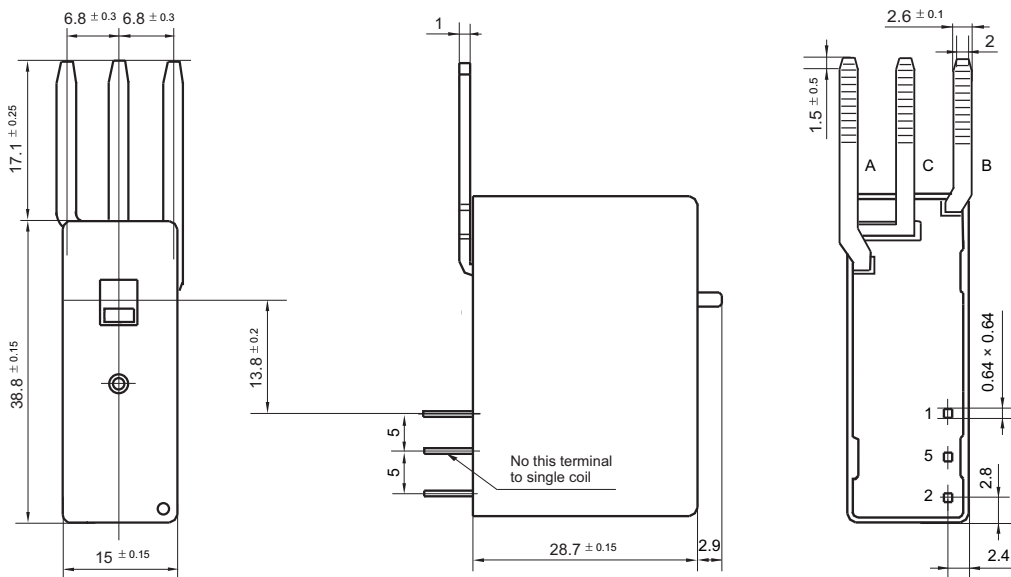


Outline Dimensions

HFE26-40/XX-HXX-LX-2



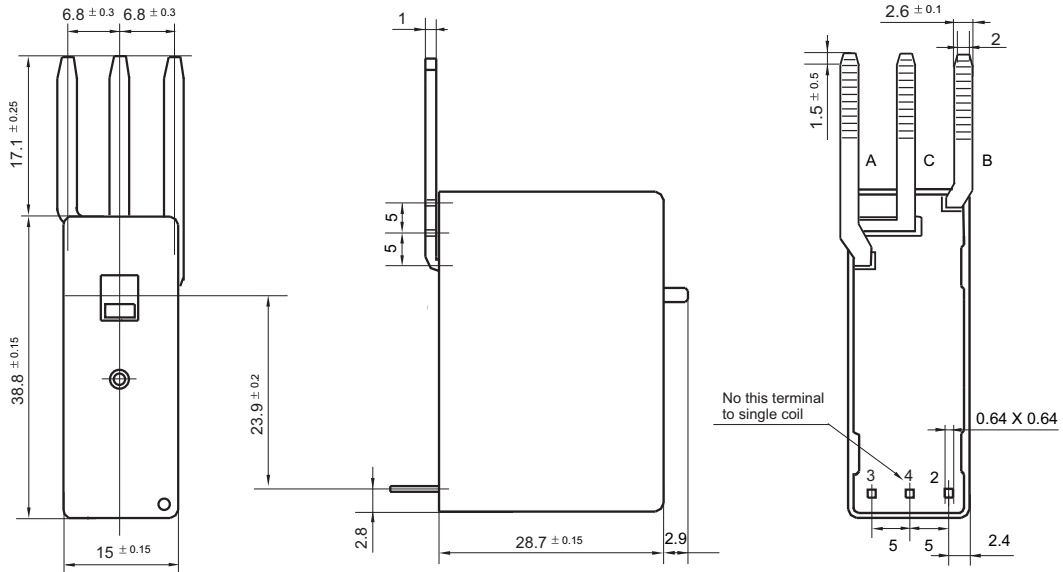
HFE26-25/XX-ZXX-LX-1



# OUTLINE DIMENSIONS AND WIRING DIAGRAM

Unit: mm

HFE26-25/XX-ZXX-LX-2



Wiring Diagram

## Positive polarity

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

1(+) 2(-) 3(+) 2(-)	1(-) 2(+) 3(-) 2(+)	1(-) 5(+) 3(-) 4(+)	5(+) 4(+)

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

1(+) 2(-) 3(+) 2(-)	1(-) 2(+) 3(-) 2(+)	1(-) 5(+) 3(-) 4(+)	5(+) 4(+)

## Negative polarity

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

1(-) 2(+) 3(-) 2(+)	1(+) 2(-) 3(+) 2(-)	1(+) 5(-) 3(+) 4(-)	5(-) 4(-)

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

1(-) 2(+) 3(-) 2(+)	1(+) 2(-) 3(+) 2(-)	1(+) 5(-) 3(+) 4(-)	5(-) 4(-)

## Disclaimer

This datasheet is for the customers' reference. All the specifications are 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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