Load voltage	Load type		Load current A			On/Off ratio		Electrical endurance OPS	Contact material	Load wiring diagram [4]
			1C		1A	On s	Off s			
			NO	NC	NO					
13.5VDC	Lamp [1]	Make	90 [2]	---	90 [2]	1	9	1×10^5 (at 85°C)	$AgSnO_2$	See diagram 4
		Break	8.8	---	8.8					
	Lamp [1]	Make	6×21W	---	6×21W	1	6	1×10^5	$AgSnO_2$	See diagram 4
		Break								
	Flasher	Make	3×21W	---	3×21W	0.365	0.365	2×10^6	Special $AgSnO_2$	See diagram 5
		Break								

1) When it is utilized in flasher, a special $AgSnO_2$ contact material should be used and the customer special code should be (170) as a suffix. Please connect by the polarity according to the diagram below.
2) Corresponds to the peak inrush current on initial actuation (cold filament).
3) Corresponds to the peak inrush current on initial actuation (motor).
4) The load wiring diagrams are listed below (Ratings of NO, NC are tested based on different samples seperately) :

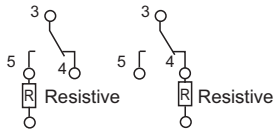


diagram 1

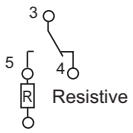


diagram 2

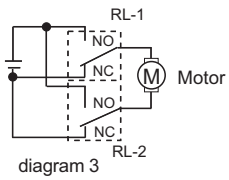


diagram 3

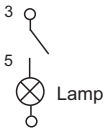


diagram 4

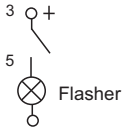


diagram 5

5) When the load voltage is at 24VDC or higher, or the applications conditions are different from the table above, please submit the detailed application conditions to Hongfa to get more support.

COIL DATA

at 23°C

Nominal voltage [1] VDC	Pick-up voltage VDC max.		Drop-out voltage VDC min.	Coil resistance x(1±10%)Ω	Power consumption W	Max. allowable overdrive voltage [2] VDC	
	at 23°C	at 85°C				at 23°C	at 85°C
6	3.6	4.5	0.5	60	0.6	9	8
9	5.4	6.8	0.7	135	0.6	13.5	12
10	6.3	7.9	0.8	180	0.6	15	13.3
12	7.3	9.0	1.0	240	0.6	18	16

1) Other types on request.
2) Max. allowable overdrive voltage is stated with no load applied.

ORDERING INFORMATION

HFKW / 012 -1Z W -L C (XXX)

Type

Coil voltage **006**: 6VDC **009**: 9VDC **010**: 10VDC **012**: 12VDC

Contact arrangement **1H**: 1 Form A **1Z**: 1 Form C

Contact material **W:** $AgSnO_2$

Construction [1] **L:** Flux proofed (Reflow soldering version) **Nil:** Plastic sealed [2]

Packing style **C:** Tape and reel packing **Nil:** Tube packing

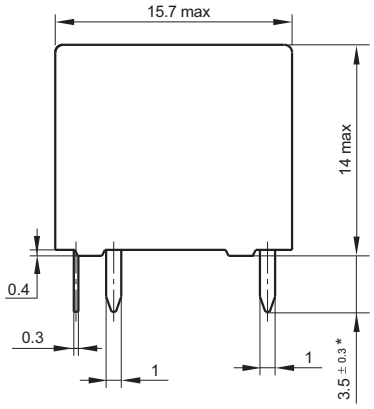
Special code [3] **XXX:** Customer special requirement **Nil:** Standard

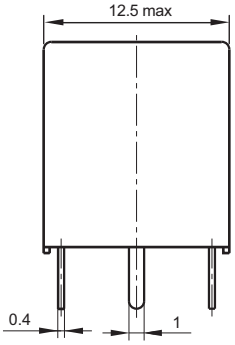
Notes: 1) The structure of HFKW/□□□-1ZW-L□ is only flux proof, the open vent hole is at the bottom of the base.
2) Contact is recommended for suitable condition and specifications if water cleaning or surface process is involved in assembling relays on PCB.
3) The customer special requirement express as special code after evaluating by Hongfa. e.g. (170) stands for flasher load.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

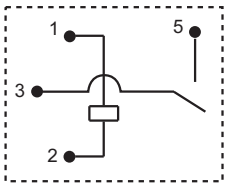
Outline Dimensions(1 Form A / 1 Form C)



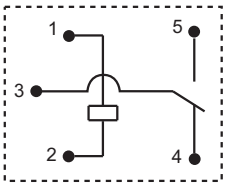


PCB Layout (Bottom view)

1 Form A

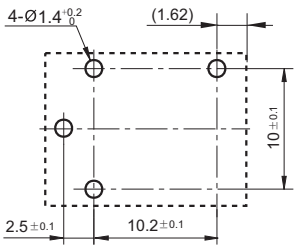


1 Form C

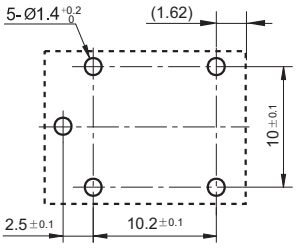


Wiring Diagram (Bottom view)

1 Form A



1 Form C

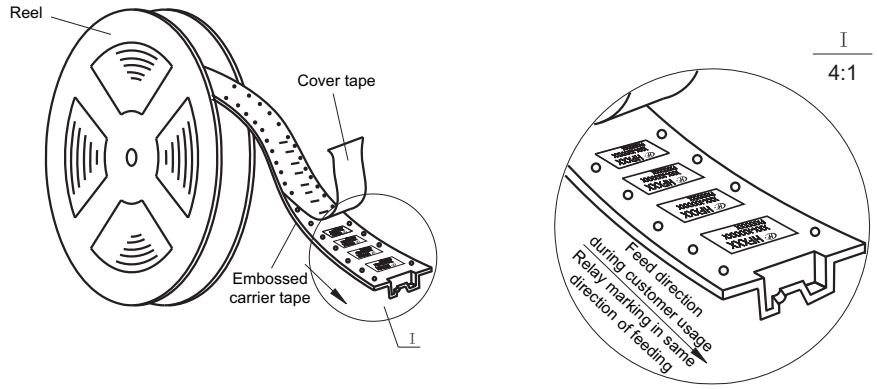


Remark: * The additional tin top is max. 1mm.

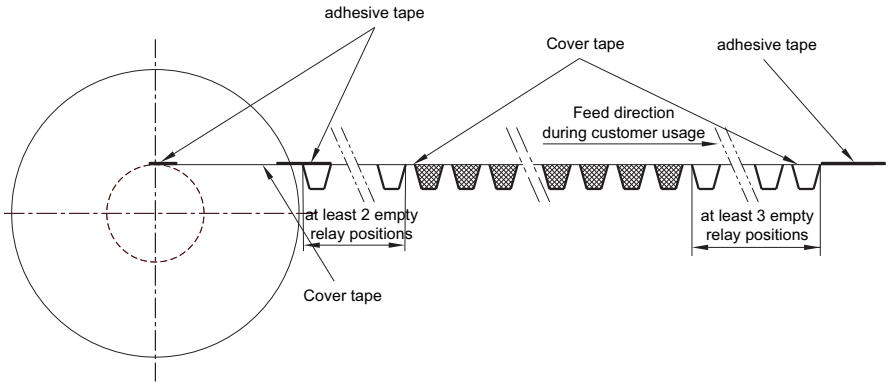
TAPE AND REEL PACKING

Unit: mm

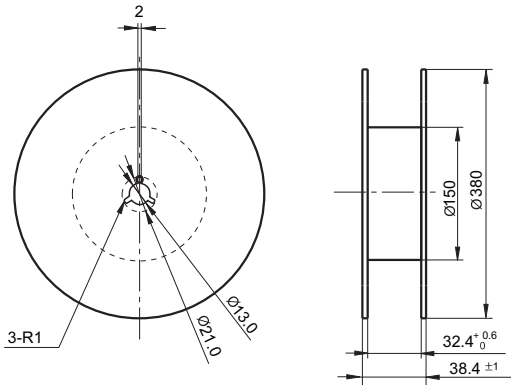
Direction of Relay Insertion



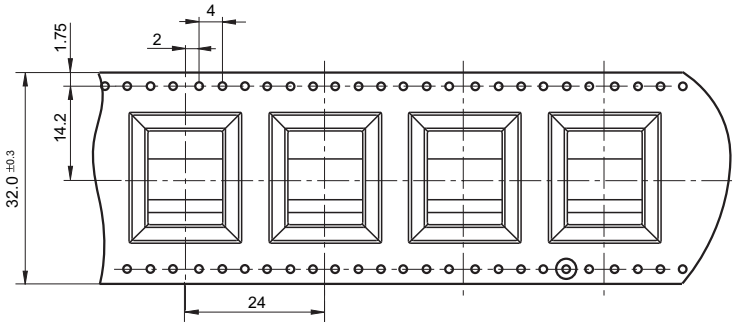
Direction of Relay Insertion



Reel Dimensions

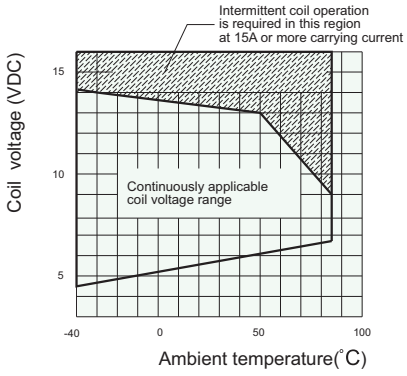


Tape Dimensions

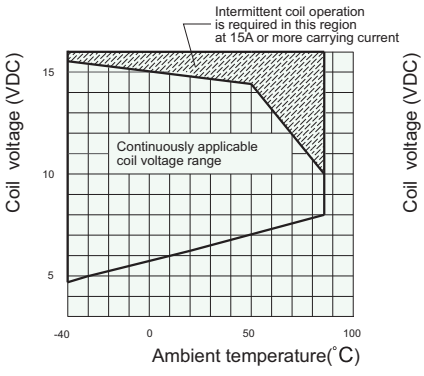


CHARACTERISTIC CURVES

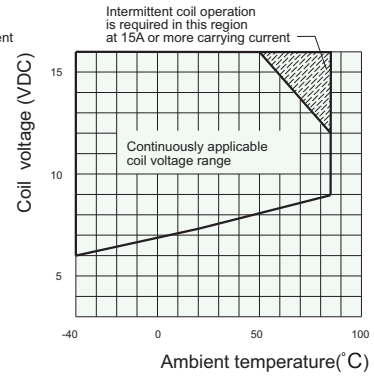
1. Coil operating voltage range (NO contacts, at 13.5VDC)



HFKW/009-1ZW(XXX)



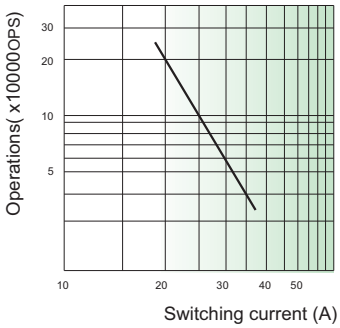
HFKW/010-1ZW(XXX)



HFKW/012-1ZW(XXX)

2. Load curve (NO contacts, at 23˚C)

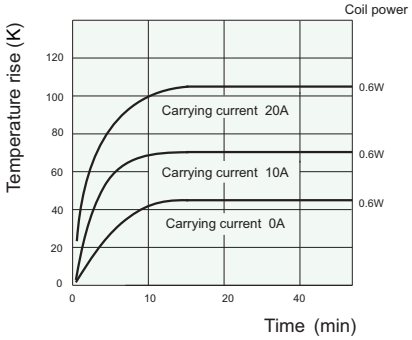
Electrical endurancecurve (Motor locked)



HFKW/012-1ZW(XXX)

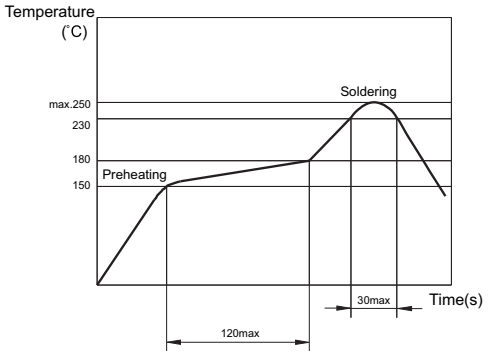
Test conditions: 0.2s ON, 2s OFF

Coil temperature rise



HFKW/012-1ZW(XXX)

3. Reflow soldering, temperature on PCB board.
(Recommended soldering temperature, only for reflow soldering version)



Disclaimer

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice.
In case there is specific criterion (such as mission profile, technical specification, PPAP etc.) checked and agreed by and between customer and Hongfa, this specific criterion should be taken as standard regarding any requirement on Hongfa product.
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.