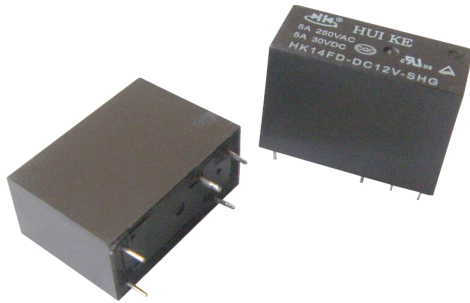


# HK14FD

## MINIATURE INTERMEDIATE POWER RELAY



### Features

- 5A switching capability
- 5kV dielectric strength (between coil and contacts)
- Plastic sealed and flux proofed types available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (29.0 x 12.7 x 20.8) mm

### ■ CONTACT DATA

Contact Form	2A 2B 2C
Contact Material	Silver Alloy
Contact Ratings	5A 250VAC /5A 30VDC
Max Switching Voltage	250VAC/30VDC
Max Switching Current	5A
Max Switching Power	1250VA /150W
Contact Resistance	100MΩ(at 1A 6VDC)
Electrical Life	1X10 <sup>5</sup> Ops(30Ops/min)
Mechanical Life	1X10 <sup>7</sup> Ops(300Ops/min)

### ■ GENERAL DATA

Insulation Resistance	100MΩ 500VDC	
Dielectric Strength	Between coil & contacts	5000VAC 1min
	Between open contacts	1000VAC 1min
Operate Time	Max. 15ms	
Release Time	Max. 5ms	
Temperature Range	- 40°C to +70°C	
Shock Resistance	Functional	98m/s <sup>2</sup> (10g)
	Destructive	980m/s <sup>2</sup> (100g)
Vibration Resistance	10 to 55Hz 1.5mm	
Humidity	40% to 85% RH	
Weight	Approx. 14g	
Safety Standard	CUL TÜV CQC	

### ■ COIL DATA

Nominal Voltage (VDC)	Coil Resistance at 20°C ± 10%(Ω)		Max Operate Voltage (VDC)	Min Release Voltage (VDC)	Max Apply Voltage (VDC)
	0.53W	0.72W			
3	17	12.5	2.25	0.30	4.20
5	47	36	3.75	0.50	7.00
6	68	50	4.50	0.60	8.40
9	160	115	6.75	0.90	12.60
12	275	200	9.00	1.20	16.80
24	1100	800	18.00	2.40	33.60
48	4170	3200	36.00	4.80	67.20

## ORDERING INFORMATION

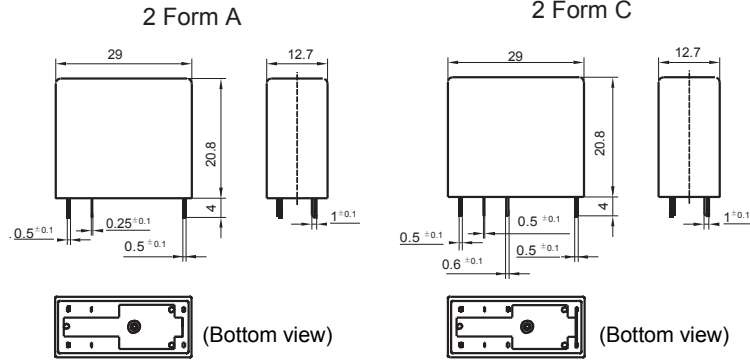
HK14FD	-	DC	6V	-	S	D	C	X	X	Special request code	G: RoHS
										Mounting termination	NIL:PCB
										Contact Form	2C 2B 2A NIL:2C
										Coil Power	D:0.72W H:0.53W
										Type of Sealing	F: Flow Solder Type S: Plastic Sealed Type
										Coil Voltage	5V 6V 9V 12V 24V 48V
										Coil Type	DC
										Type	HK14FD

- Notes:1) We recommend flux proofed types for a clean environment (free from contaminations like H<sub>2</sub>S, SO<sub>2</sub>, NO<sub>2</sub>, dust, etc.).  
We suggest to choose plastic sealed types and validate it in real application for an unclean environment (with contaminations like H<sub>2</sub>S, SO<sub>2</sub>, NO<sub>2</sub>, dust, etc).  
If water cleaning is required after the relay is assembled on PCB, please contact us for suggestion about suitable parts.
- 2) The standard type is made of black cover. If smoke cover is required, please add a special suffix (611) when ordering. Please take note that smoke cover is only available for flux proofed type.

# OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

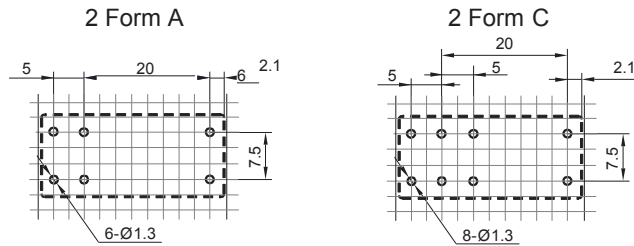
## Outline Dimensions



## Wiring Diagram (Bottom view)



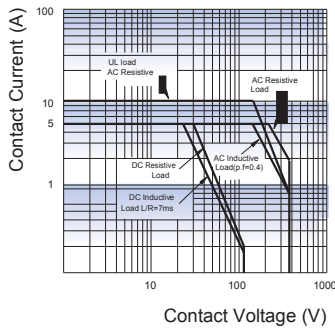
## PCB Layout (Bottom view)



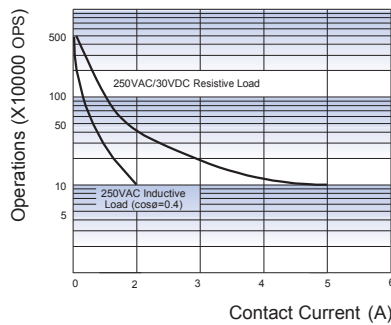
- Remark: 1) In case of no tolerance shown in outline dimension: outline dimension  $\leq 1\text{mm}$ , tolerance should be  $\pm 0.2\text{mm}$ ; outline dimension  $> 1\text{mm}$  and  $\leq 5\text{mm}$ , tolerance should be  $\pm 0.3\text{mm}$ ; outline dimension  $> 5\text{mm}$ , tolerance should be  $\pm 0.4\text{mm}$ .  
 2) The tolerance without indicating for PCB layout is always  $\pm 0.1\text{mm}$ .  
 3) The width of the gridding is 2.5mm.

## CHARACTERISTIC CURVES

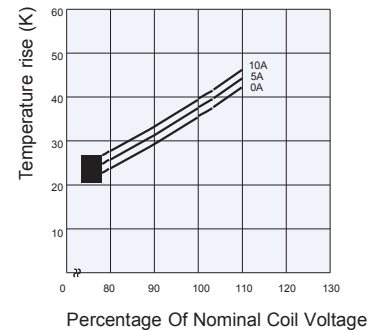
MAXIMUM SWITCHING POWER



ENDURANCE CURVE



COIL TEMPERATURE RISE



### 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 tight position to choose the suitable product for their own application. If there is any query, please contact Ever-way for the technical service. However, it is the user's responsibility to determine which product should be used only.