# **HK 14F**

# MINIATURE HIGH POWER RELAY



### Features

- 10A switching
- 5kV dielectric strength
- Plastic sealed and dust protected types available
- Environmental friendly product(RoHS compliant)
- Outline Dimensions: (29.0 x 12.7 x 20.8) mm

CONTACT DATA				
Contact Form	1A 1C			
Contact Material	Silver Alloy			
Contact Ratings	10A 250VAC /10A 30VDC			
Max Switching Voltage	250VAC/30VDC			
Max Switching Current	10A			
Max Switching Power	2500VA /300W			
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 500VD	
Dielectric Strength	Between coil & contacts	5000VAC 1min	
	Between open contacts	1000VAC 1min	
Operate Time		Max. 15ms	
Release Time		Max. 5ms	
Temperature Range		- 40℃ to +70℃	
Shock Resistance	Functional	98m/s <sup>2</sup> (10g)	
	Destructive	980m/s² (100g)	
Vibration Resistance		10 to 55Hz 1.5mm	
Humidity		40% to 85% RH	
Weight		Approx. 14g	
Safety Standard		CUL TüV	

COIL DATA								
Nominal Voltage (VDC)	Coil Resistance at 20 °C ± 10%(Ω)		Max Operate Voltage	Min Release Voltage	Max Applicate Voltage			
	0.53W	0.72W	(VDC)	(VDC)	(VDC)			
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						
HK14F - DC	K14F - DC 6V - S D 1A X X		x x	Special request code Mounting termination Contact Form Coil Power Type of Sealing	G: RoHS NIL:PCB 1C 1A 1B NIL:1C NIL:0.72W D:0.53W NIL: Flow Solder Type	
					Coil Voltage Coil Type Type	S: Plastic Sealed Type 5V 6V 9V 12V 24V 48V DC HK14F

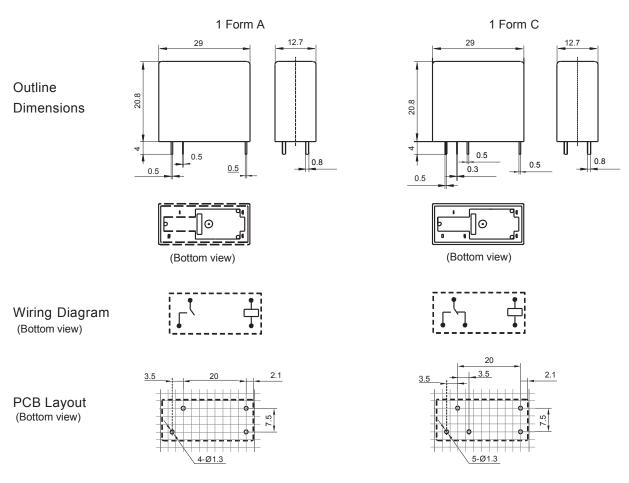
Notes:1) We recommend dust protected types for a clean environment (free from contaminations like H2S, SO<sub>2</sub>, NO<sub>2</sub>, dust, etc.). We suggest to choose plastic sealed types and validate it in real application for an unclean environment (with contaminations like H<sub>2</sub>S, SO<sub>2</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 dust protected type.

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

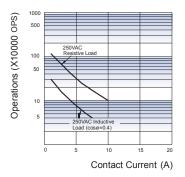


Remark: 1) In case of no tolerance shown in outline dimension: outline dimension  $\leq$  1mm, tolerance should be ±0.2mm; outline dimension >1mm and  $\leq$ 5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.

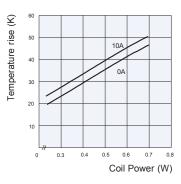
- 2) The tolerance without indicating for PCB layout is always  $\pm 0.1$ mm.
- 3) The width of the gridding is 2.5mm.

## CHARACTERISTIC CURVES





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 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.

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