

# HKV6(T78) /HKV6M

## SUBMINIATURE AUTOMOTIVE RELAY



### Features

- High current contact capacity
- Improved heat resistance
- High resistance to vibration and shock
- Reflow soldering version available
- RoHS compliant
- Outline Dimensions: (15.7 x 12.2 x 13.7) mm

### CONTACT DATA

Contact Form	1A 1C	2A
Contact Material	Silver Alloy	
Contact Ratings	20A 14VDC /5A 250VAC /7A 125VAC	2X10A 14VAC
Max Switching Voltage	250VAC 16VDC	
Max Switching Current	25A	2X10A
Max Switching Power	280W 1250VA	2X84W
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	1000VAC 1min
	Between open contacts	500VAC 1min
Operate Time	Max. 10ms	
Release Time	Max. 5ms	
Temperature Range	- 40°C to +85°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	35% to 85% RH	
Weight	Approx. 6g	
Safety Standard	CUL	

### COIL DATA

Nominal Voltage (VDC)	Coil Resistance at 20°C ± 10%(Ω)		Max Operate Voltage (VDC)	Min Release Voltage (VDC)	Max Applicate Voltage (VDC)
	0.8W	0.6W			
6	45	60	3.90	0.60	9.00
9	100	135	5.85	0.90	13.50
12	180	240	7.80	1.20	18.00
24	720	960	15.60	2.40	36.00

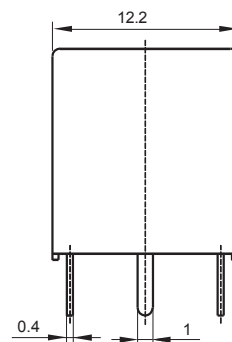
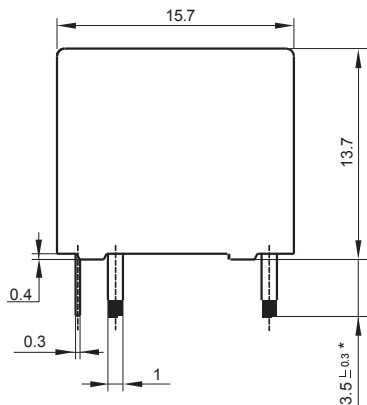
## ORDERING INFORMATION

HKV6 (T78) HKV6M	-	DC	6V	-	S	D	1C	X	X	Special request code	G:RoHS
										Mounting termination	NIL:PCB
										Contact Form	1C 1A 1B 2A NIL:1C
										Coil Power	H:0.6W D:0.8W
										Type of Sealing	F: Flow Solder Type S: Plastic Sealed Type
										Coil Voltage	DC:6V 9V 12V 24V
										Coil Type	DC
										Type	HKV6(T78) /HKV6M

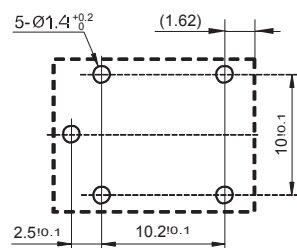
## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

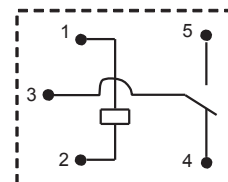
Outline Dimensions for HKV6(T78)



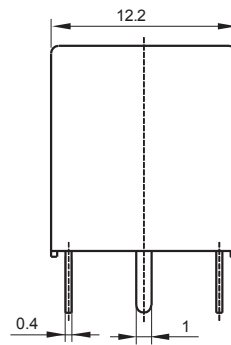
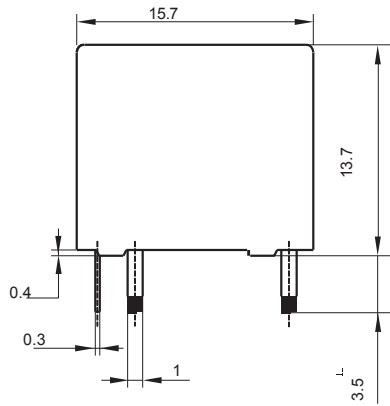
PCB Layout (Bottom view)



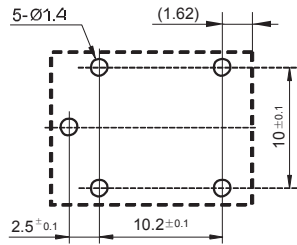
Wiring Diagram (Bottom view)



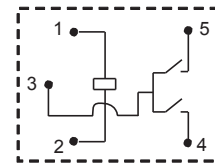
### Outline Dimensions for HKV6M



PCB Layout(Bottom view)



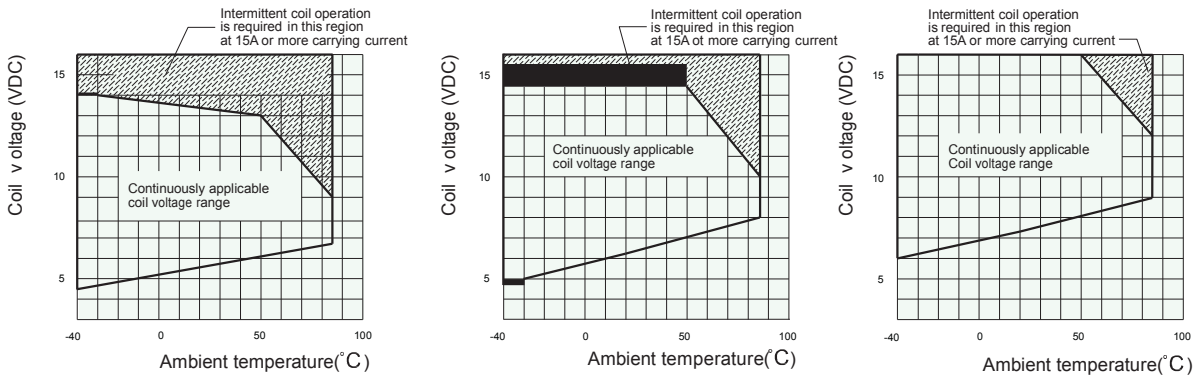
Wiring Diagram(Bottom view)



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

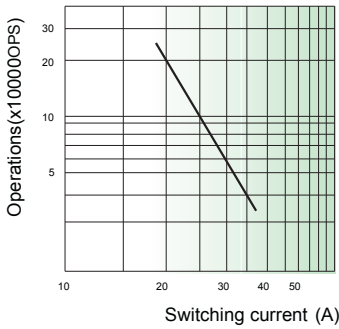
# CHARACTERISTIC CURVES

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

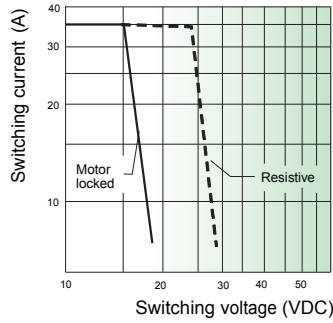


## 2. Load curve (NO contacts, at 23 °C)

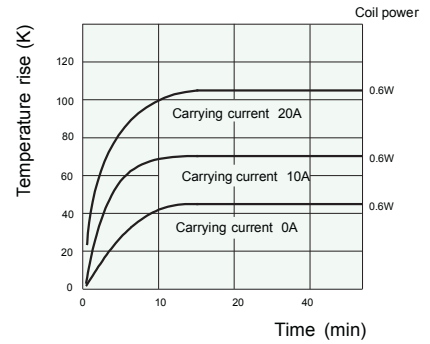
Electrical endurance curve (Motor locked)



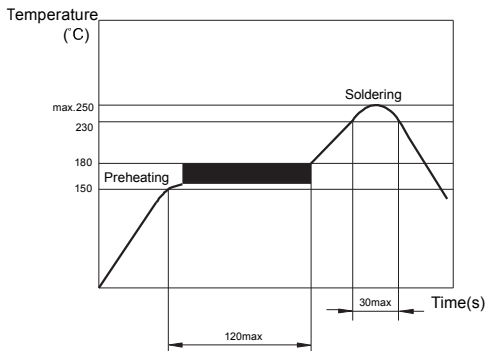
Max. switching power



Coil temperature rise



## 3. Reflow welding, temperature on PCB board. (Recommended welding temperature)



### 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.