

MK



Product Features

- ◆ Subminiature high power automotive relay
- ◆ Contact current Max.30A
- ◆ Single relay weight 4g
- ◆ Sealed and flux tight type available
- ◆ Suitable for automotive multipurpose applications etc.
- ◆ Outline dimensions:12*12.9*9.9mm

Ordering Information

Model No.	MK	C	-S	-12
Contact Form:	A: Normally Open C: Normally Open&Close			
Construction:	S:Sealed Type E:Flux tight Type			
Nominal Coil Voltage:	6,10,12,24V(DC)			

Coil Rating

Nominal Coil Voltage(VDC)	Pick up Max. (VDC)	Drop out Min. (VDC)	Coil Resistance R(1 ± 10%) Ω	Coil Power (W)	Coil Voltage Max. (VDC)	
					at 20°C	at 85°C
6	3.5	0.75	63	0.55	7.8	13.2
10	6.0	1.25	181	0.55	13	22
12	7.0	1.5	255	0.55	16	26
	6.9	1.5	181	0.8	13	22
24	14.0	3.0	1050	0.55	32	52

Contact Rating

Contact Form	1A,1C	
Contact Material	Ag Alloy	
Constant Current Max.	NO:30A(20°C1h) ;NC:25A(20°C1h)	
Switching Voltage Max.	16VDC	
Switching Current Max.	30A	
Contact Load Min.	1A/6VDC	
Voltage Drop	≤50mV (@10A)	
Endurance	Mechanical	1*10 ⁷
	Electrical	(See below charts)

1A:

Contact Load Voltage	Load Type		Contact Current(A)	On&Off		Endurance
				On(s)	Off(s)	
13.5VDC	Resistive	On	20	1	5	3*10 ⁵
		Off	20			
	Wiper motor	On	25	0.2	2	3*10 ⁵
		Off	5	1.8		
	Motor lock	On	20	0.2	2	1*10 ⁵
		Off	20			

1C:

Contact Load Voltage	Load Type		Contact Current(A)	On&Off		Endurance
				On(s)	Off(s)	
13.5VDC	Resistive	On	20	1	5	3*10 ⁵
		Off	20			
	Wiper motor	On	3*21W	0.365	0.365	2*10 ⁶
		Off				
	Motor lock	On	40	2	2	1*10 ⁵
		Off	10			

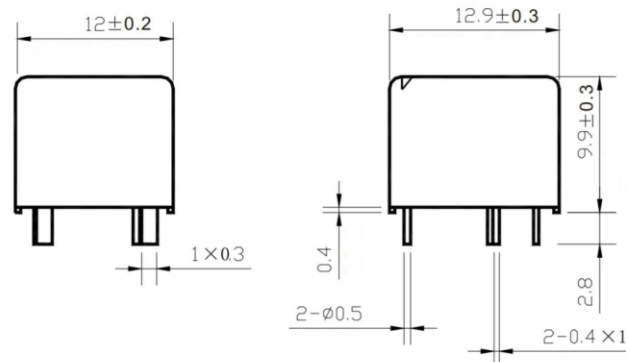
Technical Rating

Insulation Resistance	100MΩ (500VDC)	Item 7 of IEC 60255-5
Dielectric Strength	500VAC 1min	Item 6 of IEC 60255-5
Operate Time	≤ 10ms, Typical ≤ 4ms	
Release Time	≤ 10ms, Typical ≤ 3ms	
Shock Resistance	294m/s ²	IEC 68-2-27 Test Ea
Vibration Resistance	10Hz ~ 500Hz 58.8m/s ²	IEC 68-2-6 Test Fc
Leading-out Terminal	PCB Type	
Ambient Temperature	-40°C ~ 105°C	
Construction	Sealed type; Flux tight Type	
Weight	4g	

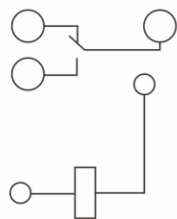
Outline Dimensions, Wiring Diagram And PCB Layout

Unit:mm

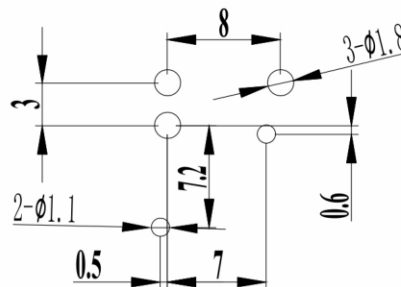
Outline Dimensions



Wiring Diagram (Bottom View)



PCB Layout (Bottom View)



- Remarks: (1) In case of no tolerance shown in outline dimension: outline dimension ≤ 1mm, tolerance should be ± 0.2mm; outline dimension > 1mm and ≤ 5mm, tolerance should be ± 0.3mm; outline dimension > 5mm, tolerance should be ± 0.4mm.
 (2) The tolerance without indicating for PCB layout is always ± 0.1mm.

Note: Specification and dimensions in this catalogue are for reference only and subject to change without notice.