

Automotive Relays for motor control

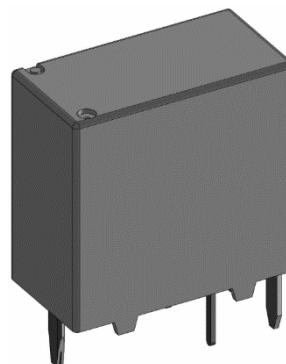
RPK Relays

▣ Features

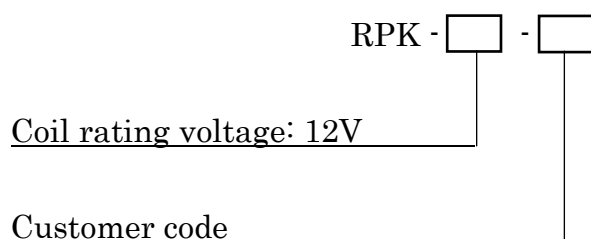
- ◇ 1 pole transfer (1 form C)
- ◇ Saving of space and PCB area
- ◇ Fit DC motor controls
- ◇ 25A rating

▣ Application

- ◇ Motor control
- ◇ Solenoid control



▣ Model Number



▣ Products Line (at 20 degree Celsius)

Model number	Nominal Voltage (VDC)	Initial Pick-up Voltage (VDC)	Initial Drop-out Voltage (VDC)	Coil resistance (Ohm +-10%)	Nominal operating current (A+-10%)	Electric power consumption (W)	Max. Allowable voltage (VDC)
RPK-12	12	7.2	1.2	225	0.053	0.64	20

Typical Specifications

Item	Specifications
Contact Arrangement Initial contact resistance Material	1c (1 form C) 100mΩ max. (DC6V1A by voltage drop) AgSnO alloy
Contact rating Nominal switching capacity Max. switching power Max. switching voltage Max. switching current *1 Max. carrying current *1	25A 13.5VDC (NO side) 480W 16VDC 30A 25A (20C, Coil12V, 10min)
Electrical specification Insulation resistance Withstanding voltage Between open contacts Between contacts and coil Coil temperature limit Operate time (at nominal voltage) Release time (at nominal voltage)	Min. 100MΩ (at 500VDC) Initial Min. 500VAC Initial Min. 500VAC Initial 180 C Wire specification 192 C Temp index(IEC60172) Max. 10ms at nominal voltage Max. 10ms at nominal voltage
Mechanical specification Shock resistance Vibration resistance	98m/s ² 10-500Hz 49m/s ²
Life expectancy Electrical life Mechanical life	100,000 operations NO contact (Contact load 13.5VDC, Resistive25A, On: Off = 1: 9sec) 1,000,000 operations 300rpm
Ambient temperature Operating range	-40 ~ +85 C (Coil applied 10~16VDC)
Unit weight	3 g

*1 changes by connection and contact's load condition. This is not contents to guarantee electricity repeatedly. Please check safety confirmation.

Dimensions

Unit: mm

Dimensions	PC board pattern (Reference) Schematic
	<p>PCB PAD LAYOUT [mm] (Top view)</p>

□ Note

1. The appearance and specifications of the product may be modified without prior notice to improve its performance.
2. This catalog shows only outline specifications. When using the product, please obtain formal specifications for supply.
3. Please see appendix “Technical Definitions” and “Technical Notes”.
4. Please feel free to contact us for relays with the specifications not shown in this catalog.
5. Please confirm the performance on actual operation by simulation with actual environments for high reliability.