

# Automotive Relays for motor control (Surface mount type)

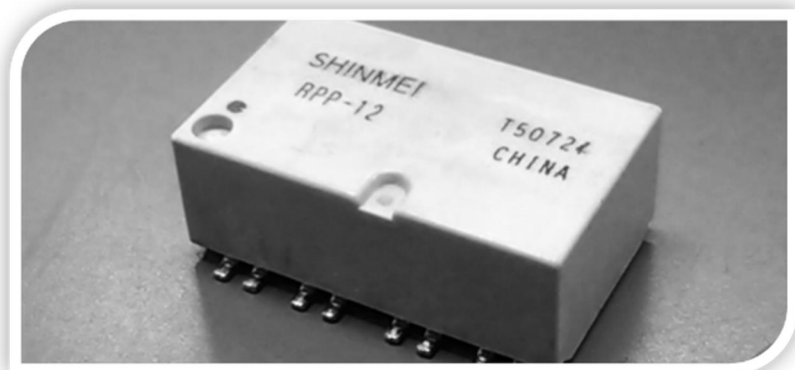
## RPP Relays

### Features

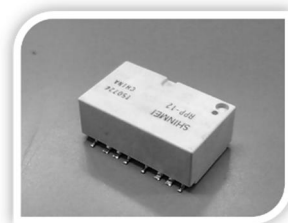
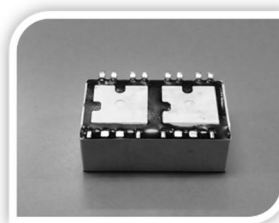
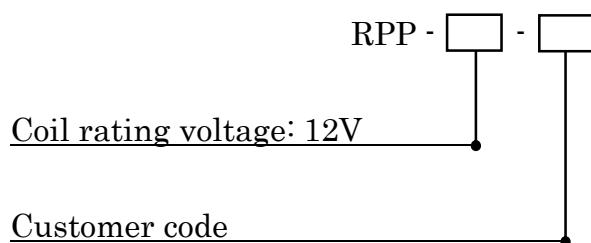
- ◇ Twin type (Two relays in one housing)  
(1 form C x 2)
- ◇ Low profile 8mm
- ◇ Forward inversion of the DC motor
- ◇ 25A rating

### Application

- ◇ Motor control
- ◇ Solenoid control



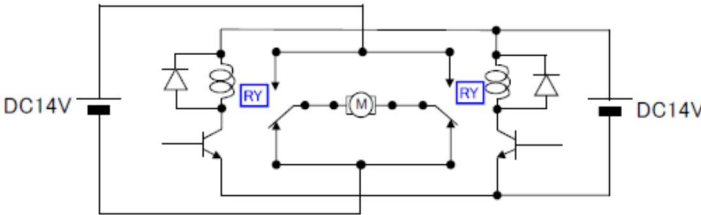
### Model Number



### 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)	Allowable voltage (VDC)
RPP-12	12	6.5	0.6	150	0.08	0.96	10-16

## □ Typical Specifications

Item	Specifications	
Contact	Arrangement Initial contact resistance Typical contact resistance Material	1c (1 form C) x2 [Two relays in one housing] 100mΩ max. DC6V1A by voltage drop 4 ~ 7mΩ typ. DC13.5V10A by voltage drop Initial AgSnO alloy
Contact rating	Nominal switching capacity Max. switching power Max. switching voltage Max. carrying current *1 Min. switching load *2	25A 14VDC (NO side) 480W 16VDC 30A (20C, Coil applied 12V, 1min, Contact initial state) 20A (20C, Coil applied 14V, Continuance, Contact initial state) 1A 14VDC (Resistive load)
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 Functional Destruction Vibration resistance Functional Destruction	98m/s2 980m/s2 10-100Hz 43m/s2 1min, Contact release Max.1ms 10-100Hz 43m/s2 2hours
Life expectancy	Electrical life Mechanical life	100,000 operations (Contact load; 14VDC 25A Motor lock, On:Off=0.5:9.5sec)  1.000.000 operations
Ambient temperature	Operating range	-40 ~ +85 C      Coil applied 10~16VDC
Unit weight		5 ~ 6 g

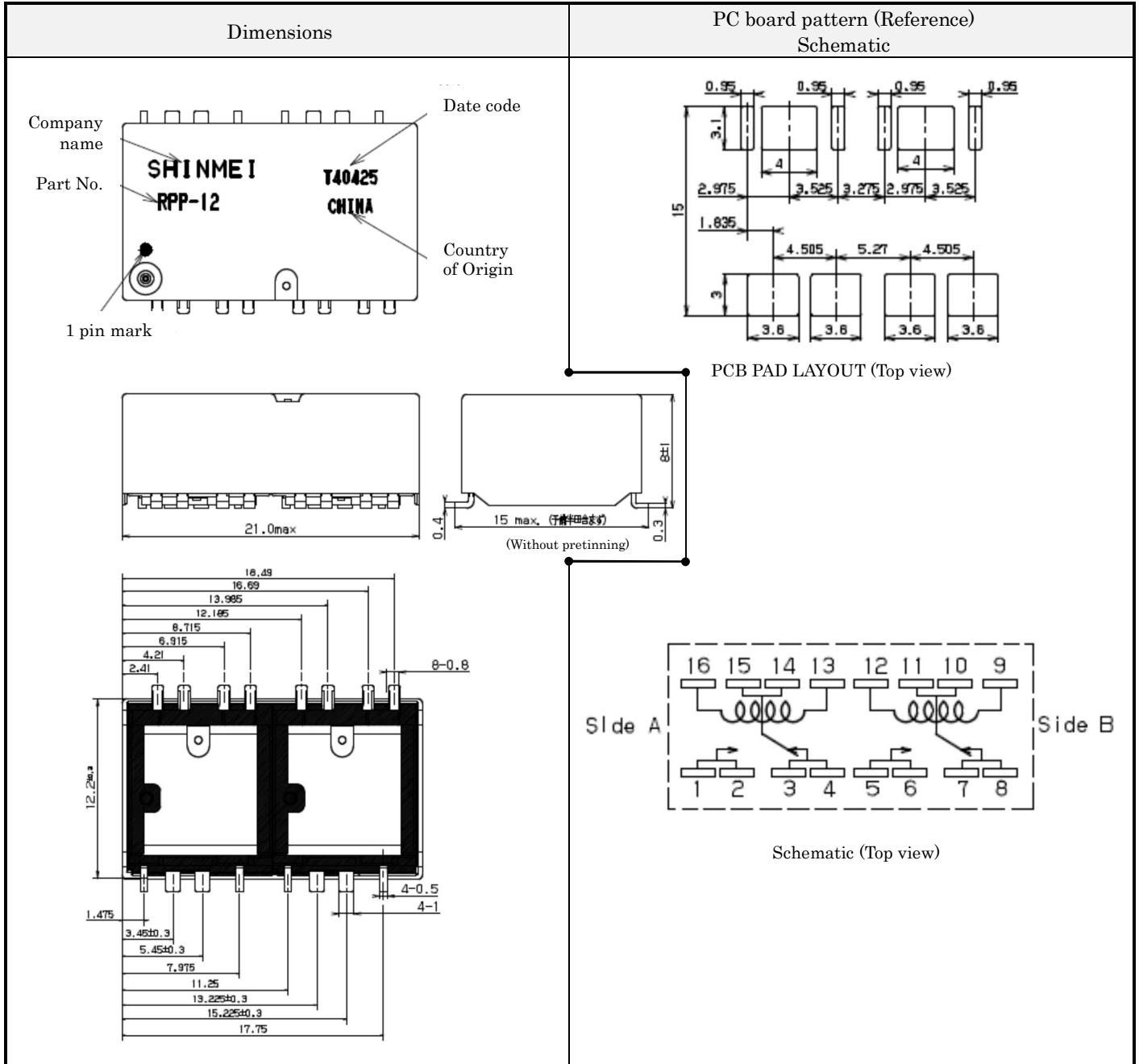
\*1 changes by a connection condition. This is not contents to guarantee electricity repeatedly. We performed the confirmation of these contents on the following conditions.

PCB thickness 1.6mm, Copper layer thickness 0.07mm, Copper layer length 1.5~3mm. NO/NC/COM side PCB area 3x3mm,  
 Connecting wire φ2.0mm(single line), Wire length 300~1000mm

\*2 "switching load" shown above should be seen as an approximate guide. This changes by environment, requirement and reliable.  
 Please confirm the performance on actual operation.

## Dimensions

Unit: mm



## 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.