

## ■ Features

- Designed for thermostat modem, computer peripherals, video recording and security applications
- Surge Strength 1500V FCC68
- Low coil power requirement for IC compatibility
- Designed for compact, high density mounting
- Conform to RoHS, ELV directive

## ■ Ordering Code

TR5V		D	S	Z	12VDC
1	2	3	4	5	
1. Relay Model	2. Coil Power: D=0.36W, L=0.2W, M=0.15W		3. S: Sealed		
4. Contact Form: Z: Form C		5. Coil Nominal Voltage: 3, 5, 6, 9, 12, 24VDC			

## ■ Coil Data (at 20°C)

Nominal Voltage(VDC)	3	5	6	9	12	24	
Coil Resistance( $\Omega \pm 10\%$ )	60	167	240	540	960	3840	0.15W
Rated Current(mA)	50	29.9	25	16.7	12.5	6.3	
Max Operate Voltage(VDC)	2.4	4	4.8	7.2	9.6	19.2	
Min Release Voltage(VDC)	0.3	0.5	0.6	0.9	1.2	2.4	
Coil Resistance( $\Omega \pm 10\%$ )	45	125	180	405	720	2880	
Rated Current(mA)	66.7	40	33.3	22.2	16.7	8.3	0.2W
Max Operate Voltage(VDC)	2.25	3.75	4.5	6.75	9	18	
Min Release Voltage(VDC)	0.3	0.5	0.6	0.9	1.2	2.4	
Coil Resistance( $\Omega \pm 10\%$ )	25	70	100	220	400	1600	0.36W
Rated Current(mA)	120	72	60	40	30	15	
Max Operate Voltage(VDC)	2.25	3.75	4.5	6.75	9	18	
Min Release Voltage(VDC)	0.3	0.5	0.6	0.9	1.2	2.4	
Max Applicable Voltage	130% of nominal voltage at 70°C, 170% of nominal voltage at 23°C						

## ■ Contact Data

Contact Form	1Z	
Contact Material	Silver Alloy	
Load	Resistive Load(COS $\Phi$ =1)	
Contact Ratings	1A 120VAC 1A 24VDC	2A 120VAC 2A 24VDC
Minimum Load	1mA 5VDC	
Max Switching Voltage	120VAC/60VDC	
Max Switching Current	1A	2A
Max Switching Power	120VA/30W	240VA/48W
Contact Resistance	100m $\Omega$ Max at 6VDC 1A	
Life Expectancy	Electrical: 100, 000 Operations (at 30 Operations/minute)	
	Mechanical: 10, 000, 000 Operations (at 300 Operations/minute)	

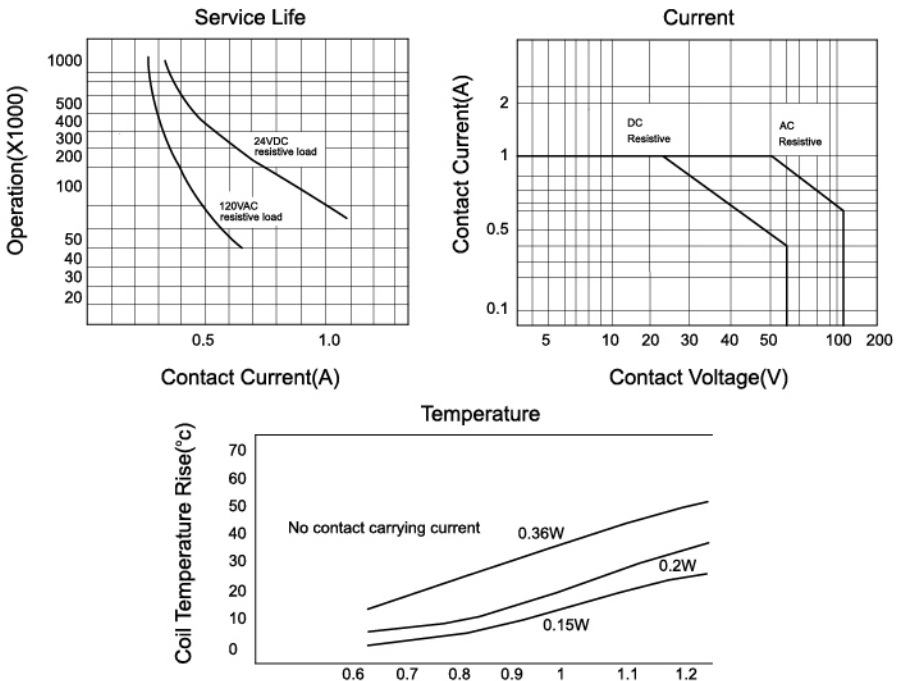
## ■ Characteristics Data

Insulation Resistance	1000MΩMin at 500VDC
Dielectric Strength Between Open Contacts	400VAC (for one minute)
Between Contacts and Coil	1000VAC (for one minute)
Operate Time	4ms
Release Time	3ms
Temperature Range	-30°C to +85°C
Shock Resistance	Operating Extremes: 10G Damage Limits: 100G
Vibration Resistance	10-55Hz, Double amplitude of 1.5mm
Max. Switching Frequency	Mechanical: 18,000 operations/hr Electrical: 1,800 operations/hr
Humidity	35-85%
Weight	Approx: 2.2g
Safety Standard	UL cUL

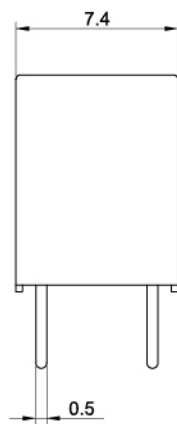
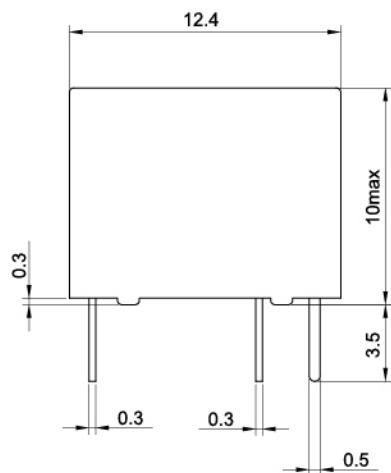
## ■ Approved Standards

Model	Coil Rating	Safety Standard	Contact Rating
TR5V	3 to 24VDC	UL/cUL	1A/2A 120VAC 1A/2A 24VDC

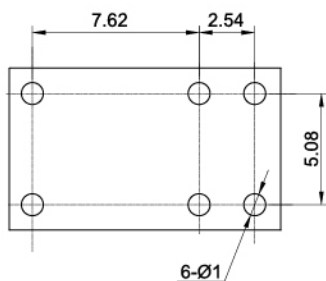
## ■ Engineering Data



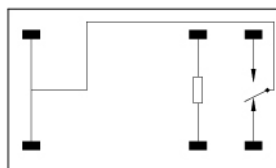
## ■ Overall and Mounting Dimensions



PCB Layout



Wiring Diagram



### Remark:

- 1). In case the tolerance is not shown in outline dimension, the tolerance should be  $\pm 0.2\text{mm}$  for outline dimension  $\leq 1\text{mm}$ ;  $\pm 0.3\text{mm}$  for outline dimension: 1~5mm and  $\pm 0.4\text{mm}$  for outline dimension  $> 5\text{mm}$ .
- 2). The tolerance without indication is always  $\pm 0.1\text{mm}$  for the dimension of PCB layout.

### Disclaimer:

These specifications are just for customers' reference and subject to change without notice.