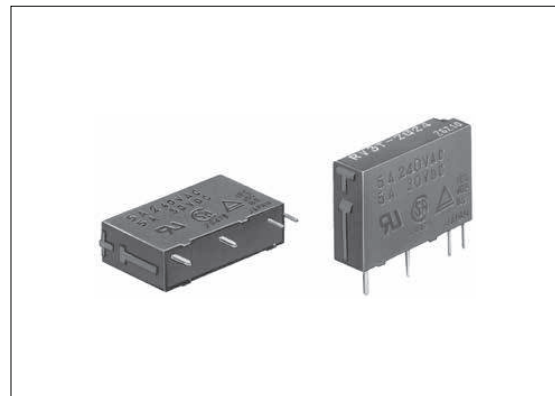


# RV3T PC Board Terminal Relays

**1NO contact, 5A. Space-saving (5mm-wide, 12.5mm-high) card relay.**

- Highly sensitive 120mW
- SIL terminal enables easy patter design of PC Board terminal.
- Washable
- c-UL, TÜV compliant.

Applicable Standards	Mark	Certification Organization/File No.
UL508		UL recognized File No. E68961
EN61810-1		TÜV Rheinland
		EU Low Voltage Directive



Power Consumption	Contact	Coil Rated Voltage	Part No.
120mW	1NO	5V DC	RV3T-1G05
		12V DC	RV3T-1G12
		24V DC	RV3T-1G24
200mW	1NO	5V DC	RV3T-2G05
		12V DC	RV3T-2G12
		24V DC	RV3T-2G24

## Coil Ratings

Power Consumption	Rated Voltage	Coil Resistance $\pm 10\%$ (at 20°C)	Rated Current $\pm 10\%$ (at 20°C)	Operating Characteristics (against rated values at 20°C)
120mW	5V DC	210 $\Omega$	24mA	<ul style="list-style-type: none"> <li>• Pickup voltage (initial value): 70% Max.</li> <li>• Dropout voltage (initial value): 5% min.</li> <li>• Maximum continuous applied voltage: 190%</li> </ul>
	12V DC	1,200 $\Omega$	10mA	
	24V DC	4,800 $\Omega$	5mA	
200mW	5V DC	125 $\Omega$	40mA	
	12V DC	720 $\Omega$	16.7mA	
	24V DC	2,880 $\Omega$	8.3mA	

## Contact Ratings

Maximum Applied Voltage	250V AC, 125V DC
Rated Current	5A
Rated Contact Voltage/Current	AC250V 5A (resistive load) 24V DC 5A (resistive load)
Minimum Applicable Load (reference value)	DC0.1V, 100 $\mu$ A

## Approved Ratings

### UL and CSA Ratings

UL Ratings			CSA Ratings		
Contacts			Contacts		
Voltage	Resistive	Inductive	Voltage	Resistive	Inductive
240V AC	5A	—	240V AC	5A	—
120V AC	—	1A (pilot duty)	120V AC	—	1A (pilot duty) (10A inrush)
120V DC	0.5A	0.2A (pilot duty)	120V DC	0.5A	0.2A (15ms)
30V DC	5A	2A (pilot duty)	30V DC	5A	2A (15ms)

### TÜV Ratings

Rated Contact Data	
Max. Rated Voltage	Max. Rated Current
AC 240V	5A
DC 120V	$\leq 5A$

## Specifications

Contact Resistance *1	30 m $\Omega$ maximum	
Operate Time *2	10 ms maximum	
Release Time *2	5 ms maximum	
Insulation Resistance	100 M $\Omega$ minimum (500V DC megger)	
Dielectric Strength	Between contact and coil: 2000V AC, 1 minute Between contact gaps: 750V AC, 1 minute	
Vibration Resistance	Damage limits	10 to 55 Hz, amplitude 0.75mm
	Operating extremes	10 to 55 Hz, amplitude 0.75mm
Shock Resistance	Damage limits	1000 m/s <sup>2</sup>
	Operating extremes	100 m/s <sup>2</sup>
Operating Temperature	-40 to +70°C (no freezing)	
Operating Humidity	45 to 85% RH (no condensation)	
Storage Temperature	-40 to +70°C (no freezing)	
Storage Humidity	45 to 85% RH (no condensation)	
Life	Mechanical	20,000,000 operations minimum (operating frequency 18,000 operations/hour)
	Electrical	See electrical life curves (operating frequency 1,800 operations/hour)
Weight (approx.)	3g	

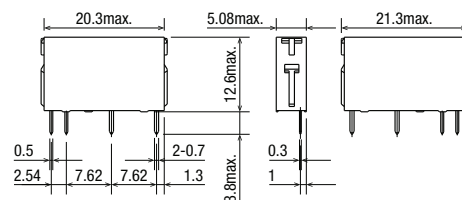
Note: Above values are initial values.

\*1: Measured using 5V DC, 1A voltage drop method

\*2: Measured at the rated voltage (at 20°C)

## Dimensions

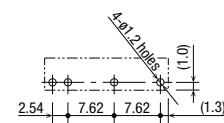
All dimensions in mm.



## Internal Connection



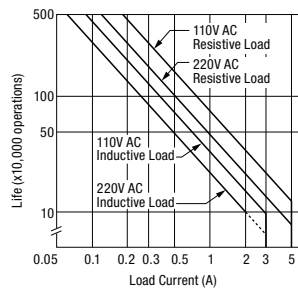
## Mounting Hole Layout (bottom view)



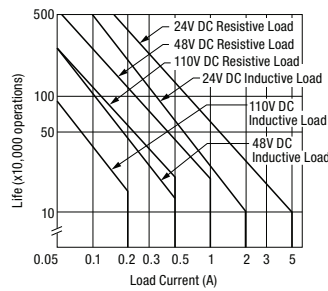
**RV3T PC Board Terminal Relays**

**Electrical Life Curve**

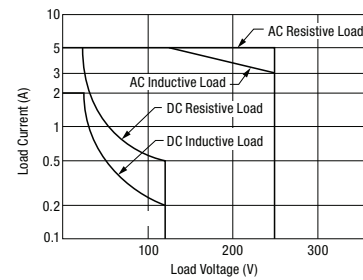
**AC Load**



**DC Load**

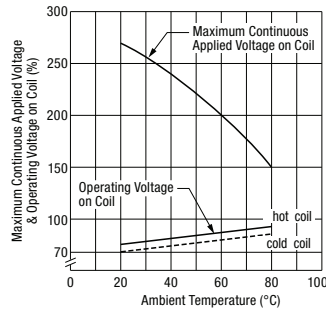


**Maximum Switching Current**

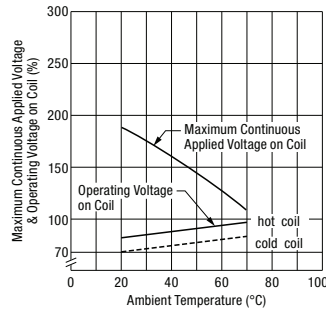


**Coil Voltage Range**

**Single Mounting**



**Collective Mounting**



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