



# Low resistance chip resistors (short-side terminal)

## ■ RL series

### Features

- Innovative structure that takes consideration of heat dissipation suppress the surface temperature enabling the small sizes reducing the influence of heat on surrounding components.

### Applications

- PC power sources, inverters, automotive electronics, adopters, industrial machines



\*1 : RL0510、RL1632、RL3264 を除く

### ◆ Part numbering system

**RL 1220 S - 1R0 - F**

Series code

Size: RL0510, RL0816, RL1220, RL1632, RL3264

Resistance tolerance

Nominal resistance value  
( $1.0\Omega = R_0$ , below  $0.09\Omega = R_0 * \ast$ : 4 digit)  
RL1632 or RL3264: 4 digit

Temperature coefficient of resistance

Current sensing surface mount resistors

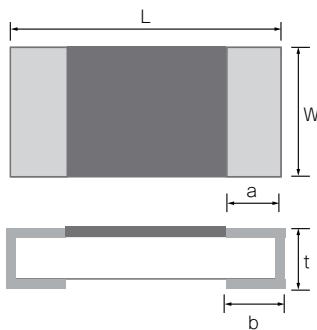
RL series

### ◆ Electrical Specification

Type	Power ratings	Temperature coefficient of resistance (ppm/ $^{\circ}\text{C}$ )	Resistance range( $\Omega$ ) Resistance tolerance			Maximum voltage	Resistance value series	Operating temperature	Packaging quantity
			$\pm 1\%$ (F)	$\pm 2\%$ (G)	$\pm 5\%$ (J)				
<b>RL0510</b>	1/8W	0 ~ +350(T)	50m $\leq$ R<100m			$\sqrt{(P \cdot R)}$	E-24	-55°C ~ 125°C	10,000pcs
	1/6W	0 ~ +200(S)	100m $\leq$ R $\leq$ 4.7		—				
<b>RL0816</b>	1/4W	0 ~ +200(S)	20m $\leq$ R<100m			$\sqrt{(P \cdot R)}$	E-24	-55°C ~ 125°C	5,000pcs
		0 ~ +350(T)	100m $\leq$ R $\leq$ 6.8						
<b>RL1220</b>	1/4W	0 ~ +100(R)	7.5 $\leq$ R $\leq$ 68			$\sqrt{(P \cdot R)}$	E-24	-55°C ~ 125°C	5,000pcs
		0 ~ +200(S)	43m $\leq$ R $\leq$ 91m						
<b>RL1632</b>	1/2W	0 ~ +350(T)	10m $\leq$ R $\leq$ 39m			$\sqrt{(P \cdot R)}$	E-24	-55°C ~ 125°C	5,000pcs
		0 ~ +100(R)	100m $\leq$ R $\leq$ 10						
<b>RL3264</b>	1W	0 ~ +200(S)	11 $\leq$ R $\leq$ 100			$\sqrt{(P \cdot R)}$	E-24	-55°C ~ 125°C	5,000pcs
		0 ~ +500(T)	510m $\leq$ R $\leq$ 4.7 <sup>1</sup>	56m $\leq$ R $\leq$ 470m	—				
				33m $\leq$ R $\leq$ 51m	—				
				27m $\leq$ R $\leq$ 30m	18m $\leq$ R $\leq$ 24m				
				—	10m $\leq$ R $\leq$ 16m				
				56m $\leq$ R $\leq$ 470m	—				
				33m $\leq$ R $\leq$ 47m	—				
				27m	18m $\leq$ R $\leq$ 22m				
				—	10m $\leq$ R $\leq$ 15m				

\*1 RL series with resistance tolerance 0.5% is also available. Please contact our sales office.

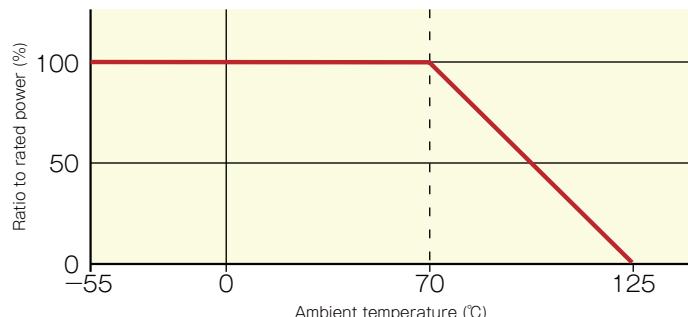
## ◆Dimensions



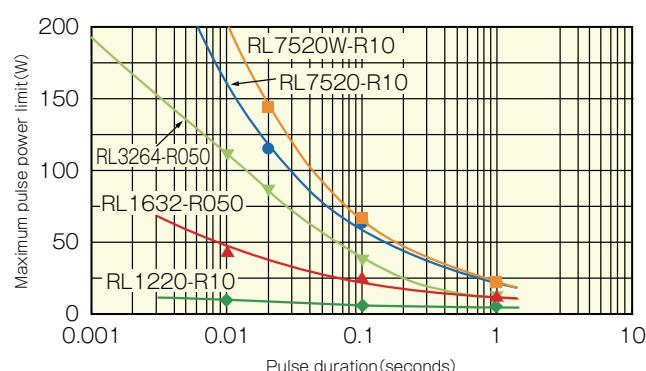
Type	Size (inch)	L	W	a	b	t
<b>RL0510</b>	0402	1.00±0.05	0.50±0.05	0.15±0.10	0.25±0.10	0.35±0.15/-0.10
					0.15±0.10	0.35±0.10
<b>RL0816</b>	0603	1.60±0.20	0.80±0.20	0.20±0.15	0.25±0.20	0.45±0.15/-0.10
					0.20±0.15	0.45±0.10
<b>RL1220</b>	0805	2.00±0.20	1.25±0.20	0.40±0.20	0.40±0.20	0.50±0.20
						0.40±0.10
<b>RL1632</b>	1206	3.20±0.20	1.60±0.20	—	1.00±0.15	0.50±0.15
<b>RL3264</b>	2512	6.40±0.20	3.20±0.20	—	2.00±0.15	0.50±0.15

(unit : mm)

## ◆Derating Curve



## ◆Resistance to power pulse



### Test procedure

Voltage pulse is applied to the test samples mounted on the test board.

After each pulse, resistance drift is measured. Pulse voltage is increased until the drift exceeds +/- 0.5%.

The power at that voltage is defined as the maximum pulse power.