



# 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, adapters, industrial machines



\*1 : Except for RL0510, RL1632 and RL3264

### ◆Part numbering system



### ◆Electrical Specification

Type	Power ratings	Temperature coefficient of resistance (ppm/°C)	Resistance range(Ω) Resistance tolerance			Maximum voltage	Resistance value series	Operating temperature	Packaging quantity
			±1% (F)	±2% (G)	±5% (J)				
RL0510	1/8W	0 ~ +350(T)	50m≤R<100m			√(P · R)	E-24	-55°C - 125°C	10,000pcs
	1/6W	0 ~ +200(S)	100m≤R≤4.7						
RL0816	1/4W	0 ~ +200(S)	20m≤R<100m						
		0 ~ +350(T)	20m≤R<100m						
	1/5W	0 ~ +100(R)	100m≤R≤6.8	—					
		0 ~ +200(S)	7.5≤R≤68						
RL1220	1/4W	0 ~ +200(S)	43m≤91m						
		0 ~ +350(T)	10m≤91m						
	1/3W	0 ~ +100(R)	100m≤R≤10						
		0 ~ +200(S)	11≤R≤100						
RL1632	1/2W	0 ~ +100(R)	510m≤R≤4.7 <sup>*1</sup>	56m≤R≤470m	—	—	—	T1 T5	
		0 ~ +200(S)	—	33m≤R≤51m	—				
		0 ~ +350(T)	—	27m≤R≤30m	18m≤R≤24m				
		0 ~ +500(T)	—	—	10m≤R≤16m				

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

Current sensing surface mount resistors  
RL series

### ◆ Dimensions



Type	Size (inch)	L	W	a	b	t
RL0510	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
RL0816	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
RL1220	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
RL1632	1206	3.20±0.20	1.60±0.20	—	1.00±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.