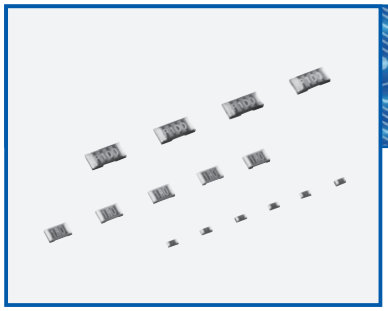


Low resistance chip resistors (short side terminal)

■ This series includes(some of) former RP and RPH series

Lead free *1 | Halogen free | RoHS Compliance

*1 : Except for RL0510、RL1632、RL3264

Features

- The distinctive structure that encourages heat dissipation and radiation limits the rise of the surface temperature, allows the realization of smaller sizes, and reduces the influence of heat on surrounding components.

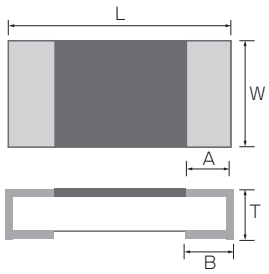
Applications

- PCs, power sources, mobile phones, automotive electronics, adaptor and industrial machining equipment.

Specifications

*All made to order.

Dimensions



unit : mm

Dimension (inch)	RL0510 (0402) (OLD:RP1005 included)		RL0816 (0603) (OLD:RP1608,RPH1608 included)		RL1220 (0805) (OLD:RP2012 included)		RL1632 (1206)	RL3264 (2512)
	R≦0.2Ω	R>0.2Ω	R≦0.082Ω	R>0.091Ω	R≦0.068Ω	R>0.075Ω		
L	1.00±0.05		1.60±0.20		2.00±0.20		3.2±0.20	6.4±0.20
W	0.50±0.05		0.80±0.20		1.25±0.20		1.6±0.20	3.2±0.20
A	0.15±0.10		0.20±0.15		0.40±0.20		—	—
B	0.25±0.10	0.15±0.10	0.25±0.20	0.20±0.15	0.40±0.20		1.00±0.15	2.00±0.15
T	0.35+0.15/−0.10	0.35±0.10	0.45+0.15/−0.10	0.45±0.10	0.5±0.20	0.4±0.10	0.5±0.15	0.5±0.15

NOTE Obsoleted: RP1005, RP1608, RPH1608, RP2012
Alternative P/N:RL0510, RL0816, RL1220

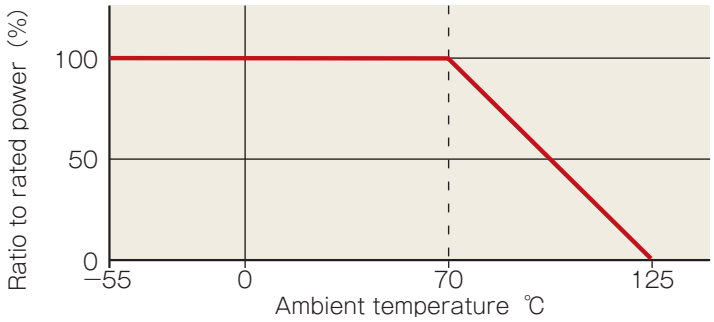
Electrical characteristics

Series name		RL0510 (OLD : RP1005 included)			RL0816 (OLD:RP1608,RPH1608 included)			RL1220 (OLD:RP2012 included)			
Power		1/8W	1/6W (OLD : RP1005 included)		1/4W (OLD : RPH1608)	1/5W (OLD : RP1608)		1/4W		1/3W (OLD : RP2012)	
E series offered		E-24									
Resistance range (Ω)		R<0.05～0.1	0.1～4.7	5.1～47	R<0.01～0.1	0.1～6.8	7.5～68	0.01～0.039	0.043～0.091	0.1～10	11～100
Resistance tolerance (%)	±1.0 (F)	○	○	○	○	○	○	○	○	○	○
	±2.0 (G)	○	○	○	○	—	○	○	○	○	○
	±5.0 (J)	—	—	○	○	—	○	○	○	○	○
Temperature coefficient of resistance (ppm/℃)	0～+100(R)	—	—	—	—	○	—	—	—	○	—
	0～+200(S)	—	○	○	○	○	○	—	○	○	○
	0～+350(T)	○	—	—	○	—	—	○	○	—	—
Maximum voltage		$\sqrt{(P \cdot R)}$									
Operating temperature		−55～125℃									
Packaging	5,000pcs	—			○						
	10,000pcs	○			—						

Series name		RL1632					
Power		1/ 2W					
E series offered		E-24					
Resistance range (Ω)		0.01～0.016	0.018～0.024	0.027～0.03	0.033～0.051	0.056～0.47	0.51～4.7
Resistance tolerance (%)	±0.5 (D)	—	—	—	—	—	○
	±1.0 (F)	—	—	○	○	○	○
	±2.0 (G)	○	○	○	○	○	—
Temperature coefficient of resistance (ppm/℃)	0～+100(R)	—	—	—	—	○	○
	0～+200(S)	—	—	—	○	—	—
	0～+350(T)	—	○	○	—	—	—
	0～+500(T)	○	—	—	—	—	—
Maximum voltage		$\sqrt{(P \cdot R)}$					
Operating temperature		−55～125℃					
Packaging	5,000pcs	○					

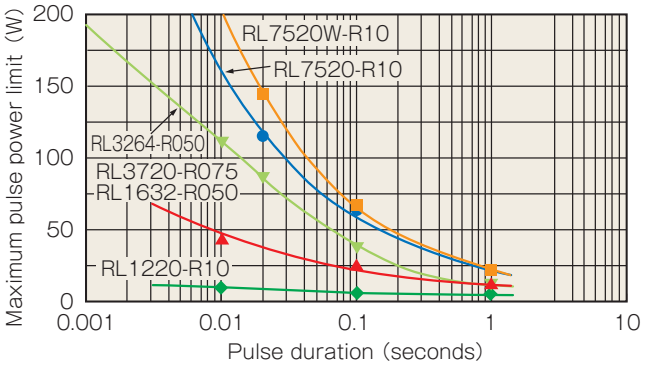
Series name		RL3264				
Power		1W				
E series offered		Standard stock item : E-24series E-12series				
Resistance range (Ω)		0.01～0.015	0.018～0.022	0.027	0.033～0.047	0.056～0.47
Resistance tolerance (%)	±0.1 (B)	—	—	—	—	—
	±0.5 (D)	—	—	—	—	—
	±1.0 (F)	—	—	○	○	○
	±2.0 (G)	○	○	○	○	○
	±5.0 (J)	—	—	—	—	—
Temperature coefficient of resistance(ppm/℃)	0～+100(R)	—	—	—	—	○
	0～+200(S)	—	—	—	○	—
	0～+350(T)	—	○	○	—	—
	0～+500(T)	○	—	—	—	—
Maximum voltage		$\sqrt{(P \cdot R)}$				
Operating temperature		−55～125℃				
Packaging	5,000pcs	○				

Power derating characteristics



Power 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.

Part numbering system

〈New name〉 RL 1220 S - 1R0 - F

- F: Resistance tolerance
- 1R0: Resistance value 1R0=1.0Ω(0.09ΩV以下はR0**) RL1632, RL3264は4digit
- S: Temperature coefficient of resistance
- 1220: Size
- RL: Series code

〈Old name〉 RP 2012 S - 1R0 - F