



# 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.

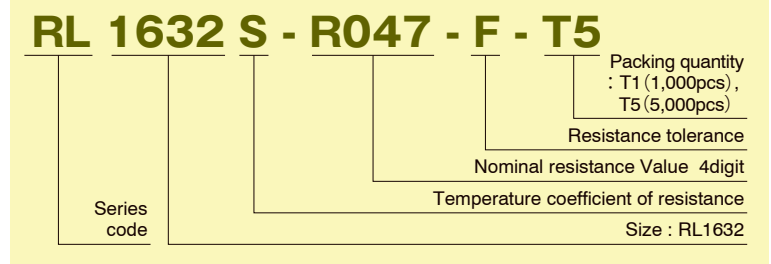
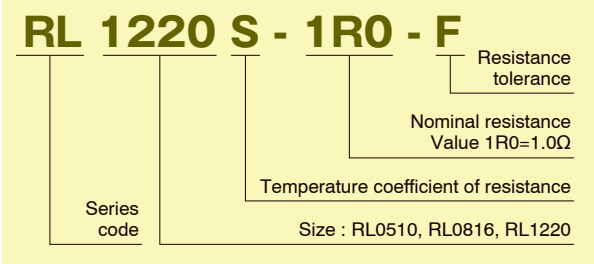
### Applications

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



\*1 : Except for RL0510, RL1632 and RL3264

## ◆Part numbering system



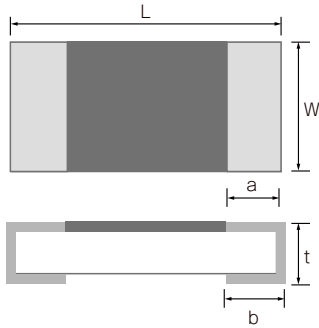
## ◆Electrical Specification

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

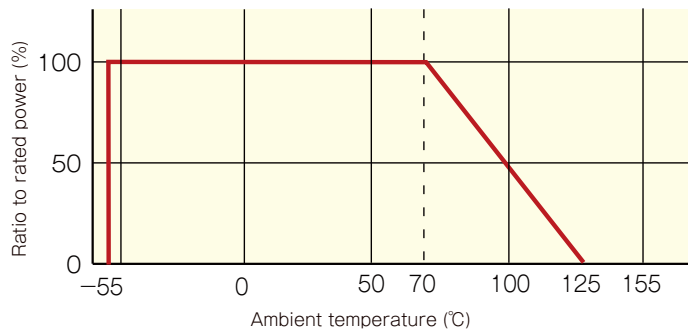
◆ Dimensions



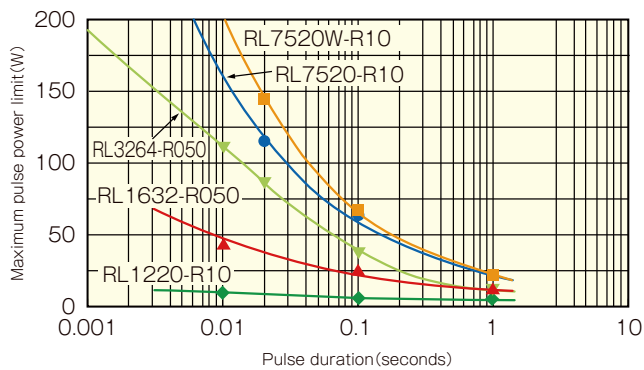
Type	Size (inch)	L	W	a	b	t
RL0510	$R \leq 0.2\Omega$	0402	$1.00 \pm 0.05$	$0.50 \pm 0.05$	$0.15 \pm 0.10$	$0.25 \pm 0.10$
	$R > 0.2\Omega$					$0.35 + 0.15 / -0.10$
RL0816	$R \leq 0.082\Omega$	0603	$1.60 \pm 0.20$	$0.80 \pm 0.20$	$0.20 \pm 0.15$	$0.45 + 0.15 / -0.10$
	$R > 0.091\Omega$					$0.45 \pm 0.10$
RL1220	$R \leq 0.068\Omega$	0805	$2.00 \pm 0.20$	$1.25 \pm 0.20$	$0.40 \pm 0.20$	$0.50 \pm 0.20$
	$R > 0.075\Omega$					$0.40 \pm 0.10$
RL1632	1206	$3.20 \pm 0.20$	$1.60 \pm 0.20$	—	$1.00 \pm 0.15$	$0.50 \pm 0.15$

(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.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Current Sense Resistors - SMD category](#):*

*Click to view products by [Susumu manufacturer](#):*

Other Similar products are found below :

[CRL0603-FW-R700ELF](#) [65709-330JE](#) [PF2512FKF7W0R007L](#) [PR2512FKF7W0R003L](#) [PR2512FKF7W0R005L](#) [PF2512FKF7W0R006L](#)  
[PF2512FKF7W0R033L](#) [CD2015FC-0.10-1%](#) [PR2512FKF7W0R004L](#) [RC1005F124CS](#) [RL73K3AR56JTDF](#) [RL7520WT-R001-F](#)  
[RL7520WT-R009-G](#) [RL7520WT-R020-F](#) [RLP73N1ER43JTD](#) [LRC-LR2512LF-01-R820J](#) [WR06X104JGLJ](#) [TL2BR01F](#) [65709-330](#) [SP1R12J](#)  
[RL7520WT-R039-G](#) [PF1206FRF7W0R02L](#) [RL7520WT-R002-F](#) [RL7520WT-R047-F](#) [KRL1632E-C-R200-F-T5](#) [KRL1632E-C-R200-F-T1](#)  
[Y14880R02000B9R](#) [RLP73M1ER051FTDF](#) [RLP73M2AR051FTDF](#) [RLP73M2AR075FTDF](#) [RLP73K2A1R0FTDF](#) [RLP73M1JR051FTDF](#)  
[RLP73N1JR47FTDF](#) [SR731ERTTP5R10F](#) [SR731ERTTP100J](#) [SR731ERTTP6R80F](#) [SR731ERTTP4R70F](#) [SR731ERTTP2R20F](#)  
[SR731ERTTP3R90F](#) [SR731ERTTP1R00F](#) [SR731ERTTP10R0F](#) [SR731ERTTP2R00F](#) [SR731ERTTP8R20F](#) [SR731ERTTP3R9J](#)  
[SR731ERTTP8R2J](#) [SR731ERTTP2R0J](#) [SR731ERTTP4R7J](#) [SR731ERTTP9R1J](#) [SR731ERTTP1R0J](#) [SR731ERTTP2R2J](#)