Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Low resistance chip resistors
(long-side terminal)

■PRL / RL series

Features

· Innovative structure that takes consideration of heat dissipation suppresses the surface temperature enabling the small sizes, reduction of the influence on surrounding components, excellent temperature cycle resistance, low ESL and low noise.
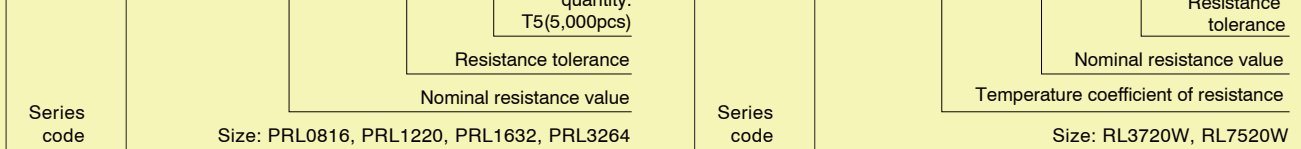
Applications

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

Lead free Halogen free RoHS Compliance

◆Part numbering system

PRL 1220 - R010 - D - T5 Packaging quantity: T5(5,000pcs)
Resistance tolerance
Nominal resistance value
Series code
Size: PRL0816, PRL1220, PRL1632, PRL3264

RL 3720W T - R10 - F
Resistance tolerance
Nominal resistance value
Temperature coefficient of resistance
Series code
Size: RL3720W, RL7520W

◆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
			±0.5% (D)	±1% (F)	±2% (G)	±5% (J)				
PRL0816	1/3W	±50	75m≦R≦100m		—	—		E-24		
		±100	43m≦R≦68m							
		—		33m≦R≦39m						
		0～+200	—	18m≦R≦27m						
		0～+350	—	10m≦R≦15m						
PRL1220	2/3W	±50	56m≦R≦100m		—		√(P・R)	E-24 1m step (7m ～ 10m)		T5
		±100	47m≦R≦51m							
		—		20m≦R≦43m						
		0～+200	—	10m≦R≦18m						
		0～+350	—	7m≦R≦9m						
PRL1632	1W	±50	56m≦R≦100m		—			E-24 1m step (5m ～ 10m)		
		±100	20m≦R≦51m							
		0～+200	10m≦R≦18m							
		0～+350	—	5m≦R≦9m						
PRL3264	2W	±50	56m≦R≦100m		—			E-24 1m step (3m ～ 10m)	-55℃ ～ 125℃	
		±100	—	47m≦R≦51m						
		0～+200	—	20m≦R≦43m						
		0～+350	—	10m≦R≦18m						
			—	5m≦R≦9m	3m≦R≦4m					
RL3720W	1W	±50(Q) ±100(R)	—	100m≦R≦1	—			E-24 1m step (1m ～ 10m)		
		0～+200(S)	—							
				5m≦R≦91m						4,000pcs
		0～+350(T)	—							
				1m≦R≦4m						
RL7520W	2W	±50(Q) ±100(R)	—	100m≦R≦470m	—			E-24 1m step (1m ～ 10m)		
				10m≦R≦91m						
		0～+200(S)	—	100m≦R≦470m						
		0～+350(T)	—	10m≦R≦91m						
		0～+420(T)	—		5m≦R≦9m					
		0～+800(T)	—		1m≦R≦4m					

◆Dimensions
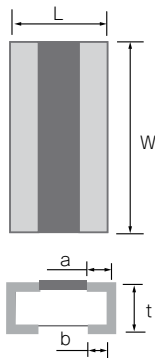
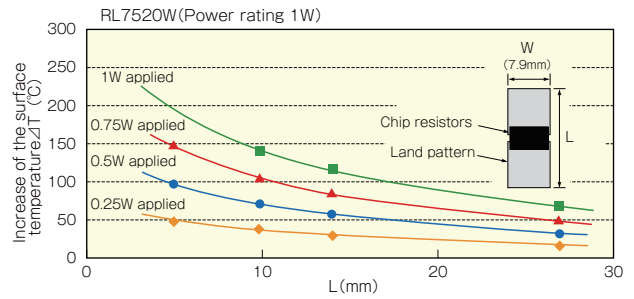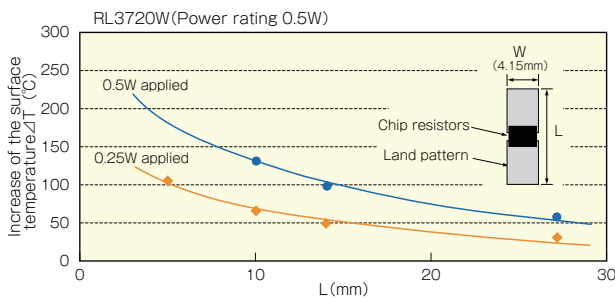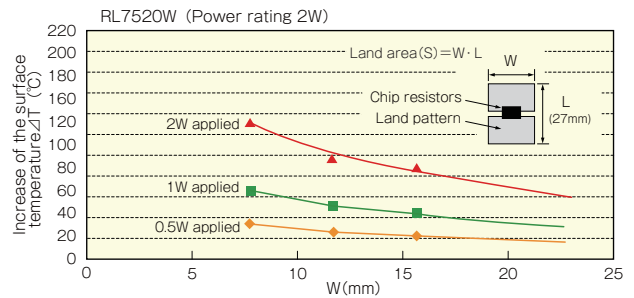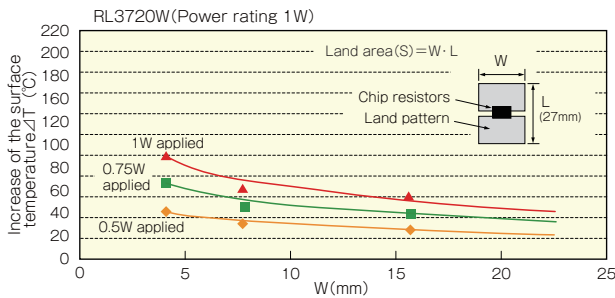| Type	Size (inch)	L	W	a	b	t
PRL0816	0603	0.80±0.20	1.60±0.20	—	0.20±0.10	0.40±0.10
PRL1220	0805	1.25±0.20	2.00±0.20	—	0.35±0.15	0.50±0.10
PRL1632	1206	1.60±0.20	3.20±0.20	—	0.45±0.15	0.50±0.10
PRL3264	2512	3.20±0.20	6.40±0.20	—	0.90±0.15	0.50±0.10
RL3720W	1508	2.00±0.20	3.75±0.30	0.40±0.20	0.40+0.20	0.50±0.20
RL7520W	3008	2.00±0.20	7.50±0.30	0.40±0.20	0.40±0.20	0.50±0.20

(unit : mm)

◆ESL (Equivalent series inductance)
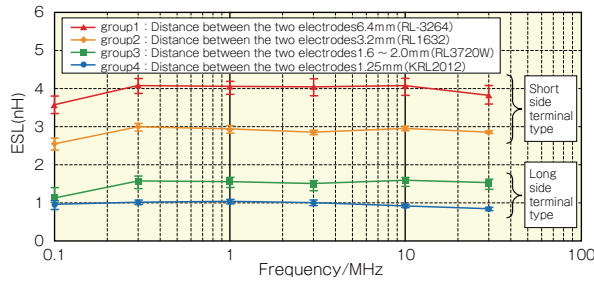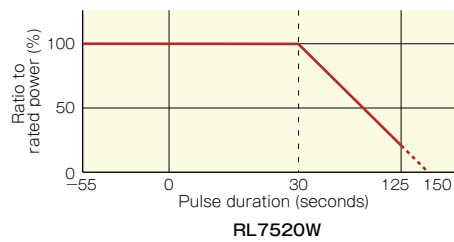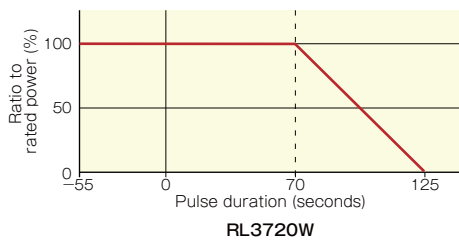

◆Surface temperature data

○ **The high power type land pattern and surface temperature**

These high-power low resistance chip resistors are designed to dissipate heat efficiently through the land patterns on circuit boards. The actual temperature of the surface of the resistor is dependent upon the dimensions and the shape of the land patterns.
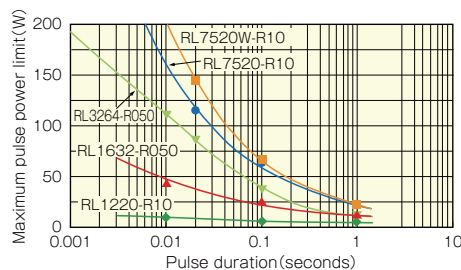

◆Derating Curve

RL3720W   RL7520W

◆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 vol tage is increased until the drift exceeds +/-0.5%. The power at that voltage is defined as the maximum pulse power.

Current sensing surface mount resistors

PRL / RL series