



**THE DATASHEET OF
RL1220S-R24-F**





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.

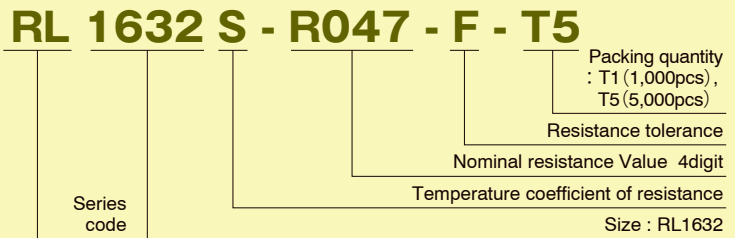
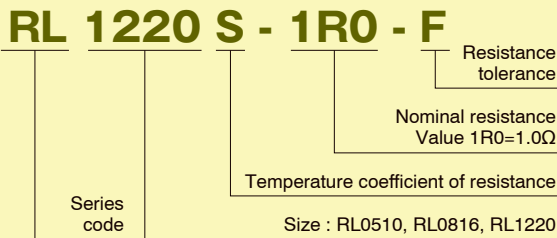
Applications

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



*1 : Except for RL0510, RL1632 and RL3264

◆Part numbering system



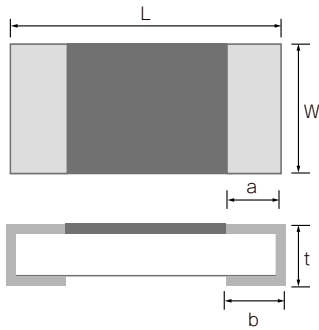
◆Electrical Specification

| 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≤47 | | — | | | | |
| 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 ^{*1} | 56m≤R≤470m | | — | | | |
| | | 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

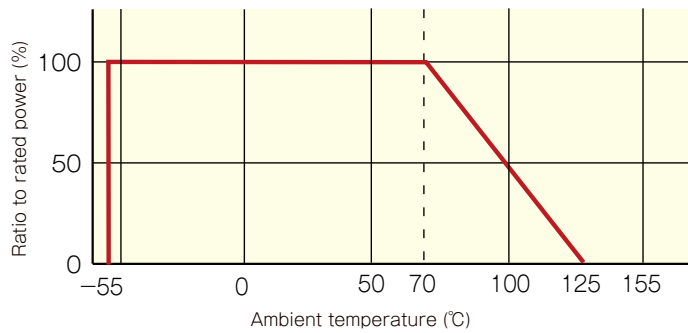
◆ Dimensions



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

(unit : mm)

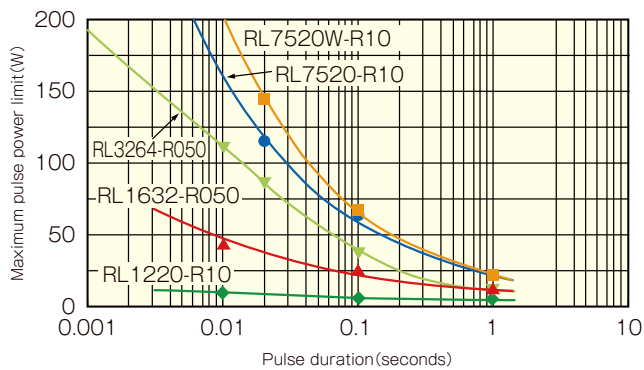
◆ Derating Curve



Current sensing surface mount resistors

RL series

◆ Resistance to pulse power





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.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View RL1220S-R24-F on WIN SOURCE](#)
-  [Susumu Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management