

RoHS Compliant

## Features

- Suitable for current detector circuit of mobile computing device and cellular phone.

## How to Order

LR 21 - R100 F - T  
 ① ② ③ ④ ⑤

- ① Series LR
- ② Size (EIA)

21	0805	50	1020
32	1206	63	2512

- ③ Resistance Value (4 digits)  
 R047 = 47mΩ  
 R330 = 330mΩ  
 1R00 = 1000mΩ

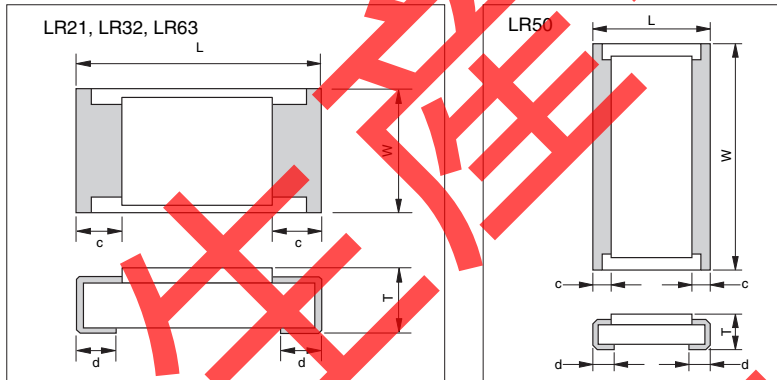
- ④ Tolerance

K	±10%
F	±1%

- ⑤ Packaging

T	Paper Taping (LR21, LR32), 5,000 pcs./ 7"reel
U	Plastic Taping (LR50, LR63), 4,000 pcs./ 7"reel

## Dimensions



• No marking on chips.

(Unit: mm)

	W	L	c	d	T
LR21 (0805)	1.25 <sup>+0.15</sup> <sub>-0.10</sub>	2.00±0.10	0.25±0.20	0.40±0.20	0.55±0.10
LR32 (1206)	1.55 <sup>+0.15</sup> <sub>-0.10</sub>	3.10±0.10	0.25±0.20	0.45±0.20	0.55 <sup>+0.10</sup> <sub>-0.05</sub>
LR50 (1020)	5.00±0.20	2.50±0.20	0.20±0.15	0.50±0.20	0.60±0.10
LR63 (2512)	3.20±0.20	6.30±0.20	0.45±0.20	0.45±0.20	0.60±0.10

## Specifications

Series	Item	Rated power	Max. working voltage	Resistance tolerance	Resistance value	Working temperature	Temperature characteristics
LR21 (0805)	0.25W (1/4W)	287mV	F: ±1%	100 to 149mΩ	-55 to +125°C	±150ppm/°C	
				150 to 330mΩ			±100ppm/°C
LR32 (1206)	0.5W (1/2W)	707mV	K: ±10%	20 to 50mΩ	-55 to +125°C	±3000ppm/°C	
			F: ±1%	100 to 149mΩ		±150ppm/°C	
LR50 (1020)	1W	316mV	F: ±1%	20 to 29mΩ	-55 to +125°C	±150ppm/°C	
				30 to 100mΩ		±100ppm/°C	
LR63 (2512)	1W	1000mV	F: ±1%	100 to 1000mΩ	-55 to +125°C	±100ppm/°C	

**Circuit design**

- 1) Once application and assembly environments have been checked, the resistors may be used in conformance with the catalog and the specifications.
- 2) Please consult the manufacturer in advance when the resistors is used in devices such as: devices which deal with human life, i.e. medical devices; devices which are highly public orientated; and devices which demand a high standard of liability.
- 3) Please use the resistors in conformance with the operating temperature provided in both the catalog and the specifications.
- 4) Please keep voltage under the rated voltage which is applied to the resistor.
- 5) Do not use the resistor in an environment where it might easily exceed the respective provisions concerning shock and vibration specified in the catalog and specifications.
- 6) Please do not use the resistor in the following environments.
  - ① State that water, oil, and solvent hang in resistor
  - ② State where poisonous gas (sulfur and chlorine, etc.) exists
  - ③ State that direct sunshine, radiation, and ultraviolet, etc. are irradiated
- 7) There is a thing that resistance changes according to the stuff of the resin when the coating with the resin is given. Please use resin coating after confirming the characteristic.
- 8) There is a thing that resistance changes according to flux and cleaner. Please use flux and cleaner after confirming the characteristic.
- 9) Please consult about a lead free products.

**Storage**

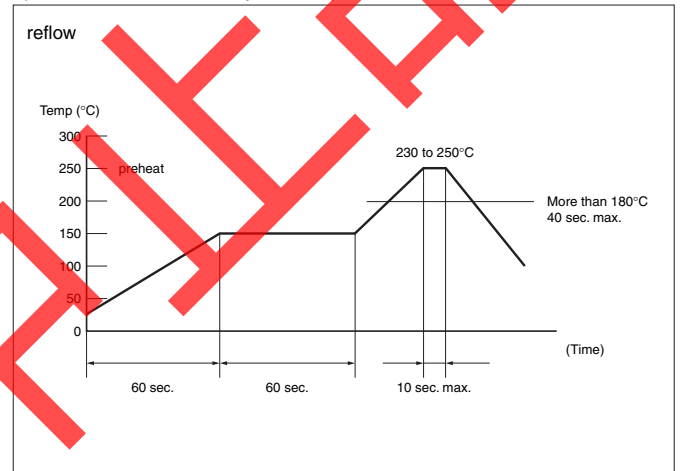
- 1) Keep storage place temperature +5 to +35°C, humidity 45 to 75% RH.
- 2) Please keep parts out of poisonous gas such as sulfur or chlorine in the air and out of salty moisture, or they may cause rust of terminal and poor solderability. Please consider the above-mentioned item after mounting.
- 3) Soldering iron

<b>Temperature</b>	soldering iron 300±5°C *
<b>Time</b>	3 sec. max. *

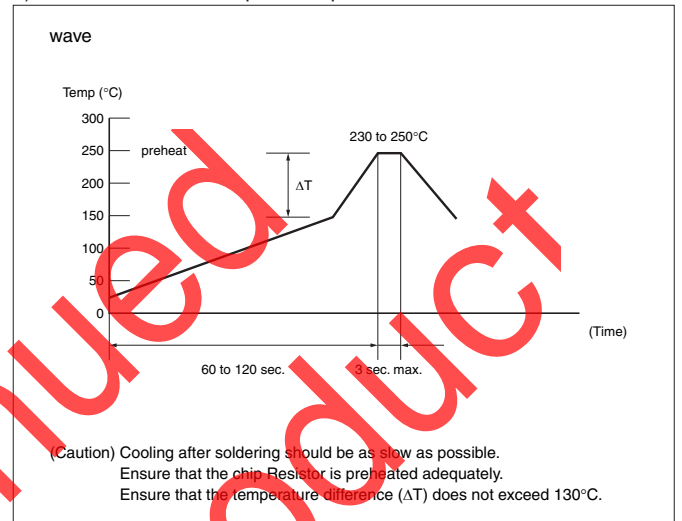
\*Do not place the soldering iron on the chip. Soldering iron is 30W max.

**Soldering method**

1) Recommendable temperature profile



2) Recommendable temperature profile



3) Pb-free recommendable temperature profile

