

# Open Air Low Resistance Resistors

**Token's Low Resistance, Low Inductance,  
Open-Air Resistor is Alternative Shunts (LRB)**



## ▶ Preview

Developed for current sensing and shunt applications, Token's LRB series of bare element resistors have a precision alloys (Ni-Cu) element welded construction. Built-in stand-offs and standard spacings make for easy mounting.

The bare metal element design allows for maximum cooling via airflow, forcing less heat into the PCB. The flameproof construction offers values down to 2mΩ with low inductance. Customer can specify resistance range designed to satisfy challenging and specific technical requirements.

These factors make the LRB Series an outstanding choice for all types of high current power supplies and power applications requiring a robust part that is impervious to most environmental stresses. The device is ideal for current limited, Current balance, and sampling sense in power supplier. It takes on the capability of high overload, and the function easily welding and non inductance as well.

The LRB Series is available in bulk packaging and is RoHS compliant and lead free. For non-standard technical requirements and special applications, please contact us with your specific needs.

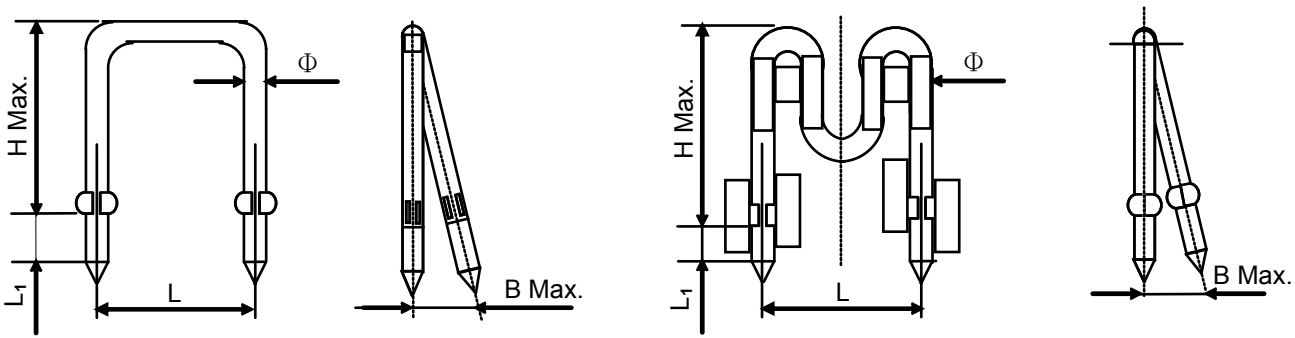
## ▶ Features

- Low inductance.
- High stability open-air style.
- Precision alloys resistive element.
- Lead (Pb)-free and RoHS compliant.
- Standard tolerance  $\pm 3\%$ ,  $\pm 5\%$ ,  $\pm 10\%$ .
- Radial leads, low resistance value 2 mΩ ~ 50 mΩ.

## ▶ Applications

- CPU Drive Control.
- Power Tool Motor controls.
- Automotive, Feedback System.
- Inverter and Switching Power Supplies.
- Power Supply Shunt, Current Detective.
- Residual Battery Power Detection, and Current Sensing.

## ▶ Dimensions (Unit: mm)

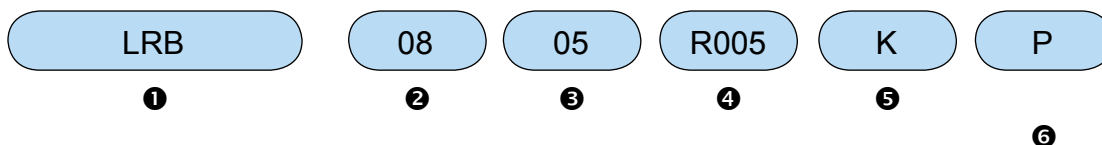


RM (mm)	H Max. (mm)	B Max. (mm)	Ø (mm)	L1 (mm)
5 ~ 50	20	1	5 ~ 29	3±0.5

## ▶ Specification

Type	Diameter Ø (mm)	Rated Current (A)	Resistance Range (mΩ)	Tolerance (%)	Temperature Coefficient (ppm/°C)	Temperature Range (°C)
LRB-05	0.5	2.5	20~50	±3%(H) ±5%(J) ±10%(K)	±50 ~ ±100	-55 ~ +85
LRB-06	0.6	3.0	20~50			
LRB-07	0.7	4.0	20~50			
LRB-08	0.8	4.5	20~50			
LRB-09	0.9	5.0	10~50			
LRB-10	1.0	5.5	10~30			
LRB-11	1.1	6.0	5~20			
LRB-12	1.2	7.0	5~20			
LRB-13	1.3	7.5	5~20			
LRB-14	1.4	8.0	5~20			
LRB-15	1.5	9.0	5~20			
LRB-16	1.6	9.5	5~15			
LRB-18	1.8	11	3~10			
LRB-20	2.0	12	2~8			
LRB-23	2.3	14	2~8			
LRB-25	2.5	17	2~5			
LRB-29	2.9	21	2~5			

## How to Order



① Part Number: LRB

② Diameter Ø

Code	Diameter Ø
05	0.5 mm
06	0.6 mm
07	0.7 mm
08	0.8 mm
09	0.9 mm
10	1.0 mm
11	1.1 mm
12	1.2 mm
13	1.3 mm
14	1.4 mm
15	1.5 mm
16	1.6 mm
17	1.7 mm
18	1.8 mm
20	2.0 mm
23	2.3 mm
25	2.5 mm
29	2.9 mm

③ Leads Pitch RM (mm)

Code	Leads Pitch RM (mm)
05	5 mm
10	10 mm
15	15 mm
20	20 mm
25	25 mm
30	30 mm
35	35 mm
40	40 mm
45	45 mm
50	50 mm

④ Resistance Value (Ω)

Code	Resistance Value (Ω)
05	0.5 mm
10	10 mm
15	15 mm

⑤ Tolerance %

Code	Tolerance %
H	±3%
J	±5%
K	±10%

⑥ Package-Code

Code	Package-Code
P	Bulk

*Back to 1st Page - Open Air Low Resistance Resistors (LRB)*