

The content of this specification may change without notification 09/01/08

LR Series - Metal Foil Current Sense Resistor

Custom solutions are available.

HOW TO ORDER

LR01

R005

J

M

Packaging

M = Tape/Reel (4K/Reel, embossed tape)

Tolerance (%)

$$F = +1$$
$$G = +2^*$$
$$J = +5$$

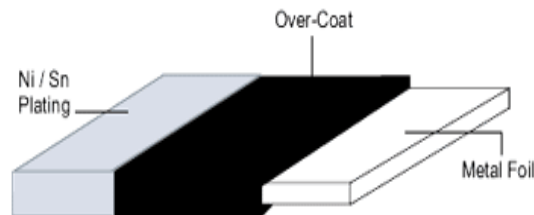
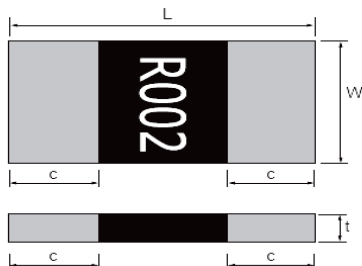
EIA Resistance Value

$$R_{005} = 0.005\Omega \text{ (5m}\Omega\text{)}$$
$$R002 = 0.002\Omega \text{ (2m}\Omega\text{)}$$
$$R_{001} = 0.001\Omega \quad (1\text{m}\Omega)$$

Series Size

LR01 = 2512. LR12=2010. LR18=1206

*AAC has the ability to manufacture +2% tolerance as an option based on customer's requirement.



FEATURES

- Ultra Low Resistances (down to 1mΩ)
Suitable for large current detecting
- Extremely low TCR
- Over coating: Molding compound
UL-94 V-0 grade

APPLICATIONS

- Power unit (VRM) for CPU
- Battery charges
- Power Supply
- DC/DC converter

DIMENSIONS (mm)

Size	L	W	a	t
2512	6.4 ± 0.2	3.2 ± 0.2	2.0 ± 0.2 ($\leq 2\text{m}\Omega$) 0.9 ± 0.2 ($> 2\text{m}\Omega$)	0.6 ± 0.2
2010	5.0 ± 0.2	2.5 ± 0.2	0.6 ± 0.3	0.7 ± 0.2
1206	3.3 ± 0.2	1.6 ± 0.2	0.5 ± 0.2	0.7 ± 0.2

RATING

Type	LR18 = 1206	LR12 = 2010	LR01 =2512	
Power Rating	1/4W & 1/2W	1W	1W	2W
Resistance Value	5~20mΩ	3~30mΩ	1~50mΩ	1~10mΩ
Operation Temperature Range	-55°C~+170°C			
Temperature Coefficient of Resistance	±275ppm/°C ±100ppm/°C ±75ppm/°C R≤1mΩ 1mΩ<R≤10mΩ R>10mΩ			
Tolerance	±1%, ±2%, ±5%			
Insulation Resistance	Over 100MΩ			
Maximum Working Voltage (V)	(P*R) ^{1/2}			

DERATING CURVE

If the ambient temperature exceeds 70°C, the rated power has to be derated according to the power derating curve shown to the right.

