

Metal foil low resistance chip resistors (short-side terminal)

■ KRL series

AEC-Q200 Compliant

Features

- High current sensing short side terminal low resistance chip resistor
- Two types available: high temperature (operating temperature up to 175°C), low emf type (operating temperature up to 155°C).
- High current handling capability and wide range of power ratings
- Size: 0510 ~ 50110, power ratings: 0.2W ~ 5W, resistance value range: 5m ~ 1000mΩ
- Face down construction. Choice between bottom only or wrap around terminal

Applications

- Automotive electronics
- Power source devices, ACDC converters, DCDC converters
- Motors, inverters, office automation equipment



◆ Part numbering system

KRL 1220E - C - R010 - F - T1

Series code

Size: KRL0510, KRL0816, KRL1220, KRL1632
KRL2550, KRL3264, KRL50110

Terminal type: D (bottom terminal), E (wrap around terminal)

Packaging quantity:
T1(1,000pcs), T5(5,000pcs)

Resistance tolerance

Nominal resistance value

Temperature characteristics type:
C (high operating temperature), M (low EMF)

◆ Electrical Specification

Type	Power ratings	Temperature coefficient of resistance (ppm/°C)	Resistance range(Ω) ^{*1}		Resistance tolerance	Resistance value series	Operating temperature		Packaging quantity
			±1% (F)	±2% (G)			C	M	
KRL0510 ^{※2}	0.2W	±50	50m ≤ R ≤ 100m			E-6 / E-12 ^{※3}	-55°C ~ 175°C	-55°C ~ 155°C	10,000pcs
		±100							
KRL0816	0.3W	±50	10m ≤ R ≤ 500m	—					
		±100	5m ≤ R ≤ 9m(1m step)						
KRL1220	0.5W	±50	10m ≤ R ≤ 500m	—					
		±100	5m ≤ R ≤ 9m(1m step)						
KRL1632	0.75W	±50	10m ≤ R ≤ 500m	—					T1
		±100	3m ≤ R ≤ 9m(1m step)					T5	
KRL2550	1.5W	±50	10m ≤ R ≤ 500m	—					
		±100	5m ≤ R ≤ 9m(1m step)						
KRL3264	3W	±50	10m ≤ R ≤ 1000m	—					
		±100	3m ≤ R ≤ 9m(1m step)						
		±200	2m						
KRL50110	5W	±50	10m ≤ R ≤ 1000m	—					
		±100	5m ≤ R ≤ 9m(1m step)					T1	

*1 We can meet your requirement for resistance value not specified in above table. Please contact our sales office.

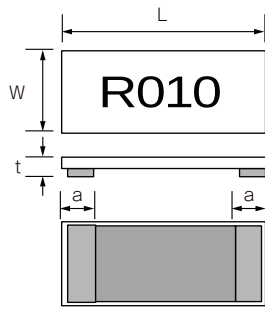
*2 For KRL0510, please contact our sales office

*3 We can meet your requirement outside of E-6/E-12 series resistance. Please contact our sales office.

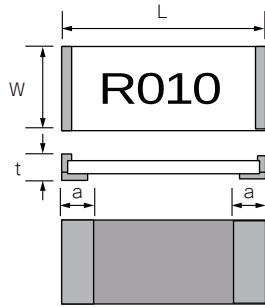
Current sensing surface mount resistors

KRL series

◆ Dimensions



D Type



E Type

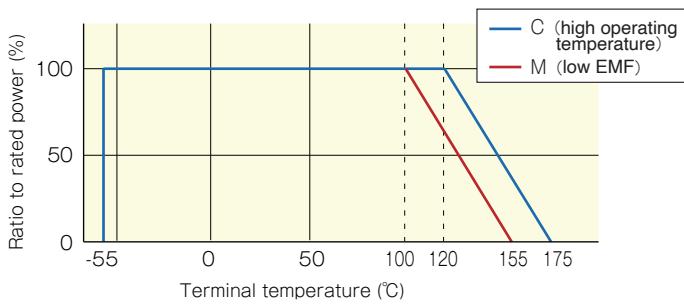
Type	Size (inch)	L	W	t	a
KRL0510	0402	1.00±0.20	0.50±0.20	0.40±0.20	0.30±0.20
KRL0816	0603	1.60±0.20	0.80±0.20	0.50±0.20	0.30±0.15(5mΩ) / 0.70±0.15(6 ~ 18mΩ) 0.55±0.15(20 ~ 39mΩ) / 0.30±0.15(47mΩ~)
KRL1220	0805	2.00±0.20	1.25±0.20	0.50±0.20	0.40±0.20
KRL1632	1206	3.20±0.20	1.60±0.20	0.50±0.20	0.50±0.20(9mΩ~)/1.10±0.20(3 ~ 8mΩ)
KRL2550	2010	5.00±0.20	2.50±0.20	0.50±0.20	0.60±0.20(9mΩ~)/1.40±0.20(6 ~ 8mΩ)/ 1.60±0.20(5mΩ)
KRL3264	2512	6.30±0.20	3.10±0.20	0.50±0.20	1.00±0.20(9mΩ~)/1.90±0.20(5 ~ 8mΩ)/ 2.50±0.20(3 ~ 4mΩ)/2.70±0.20(2mΩ)
KRL50110	4320	11.00±0.20	5.00±0.20	0.65±0.20	2.36±0.30(8mΩ~)/3.60±0.30(5 ~ 7mΩ)

(unit : mm)

Current sensing surface mount resistors

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◆ Derating Curve



KRL1632E-3A series (1W) is also in our line-up.

