



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

■ KRL series

AEC-Q200 Compliant

Features

- High current sensing long 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: 1608 ~ 15075, power ratings: 0.5W ~ 10W, resistance value range: 1m ~ 500mΩ
- 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 2012E - C - R010 - F - T1

Packaging quantity: T05 (500pcs)
T1 (1,000pcs), T5 (5,000pcs)

Series code

Size: KRL1608, KRL2012, KRL3216, KRL5025
KRL6432, KRL7638, KRL9045, KRL11050
KRL15075

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

Nominal resistance value

Resistance tolerance

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

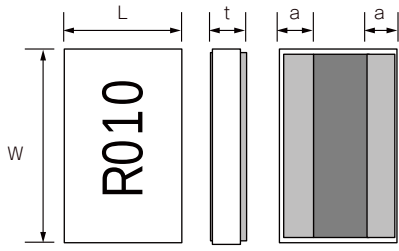
◆ Electrical Specification

Type	Power ratings	Temperature coefficient of resistance (ppm/°C)	Resistance range(Ω) Resistance tolerance ^{*1}			Resistance value series	Operating temperature		Packaging quantity									
			±1% (F)	±2% (G)	±5% (J)		C	M										
KRL1608	0.5W	±50	10m≤R≤100m	—	—	E-6 ^{*2}	-55°C ~ 175°C	-55°C ~ 155°C	T5									
		±100	—	5m≤R≤9m	—													
KRL2012	1W	±50	3m≤R≤9m (1m step) 10m≤R≤500m	—	—				E-6 ^{*2}	-55°C ~ 175°C	-55°C ~ 155°C	T1						
		±100	—	R=2m	—													
		±150	—	—	R=1m													
KRL3216	1.5W	±50	3m≤R≤9m (1m step) 10m≤R≤500m	—	—							E-6 ^{*2}	-55°C ~ 175°C	-55°C ~ 155°C	T1			
		±100	—	R=2m	—													
		±150	—	—	R=1m													
KRL5025	2W	±50	3m≤R≤9m (1m step) 10m≤R≤500m	—	—										E-6 ^{*2}	-55°C ~ 175°C	-55°C ~ 155°C	T1
		±100	—	R=2m	—													
		±150	—	—	R=1m													
KRL6432	3W	±50	3m≤R≤9m (1m step) 10m≤R≤500m	—	—													E-6 ^{*2}
		±100	—	R=2m	—													
		±150	—	—	R=1m													
KRL7638	4W	±50	3m≤R≤9m (1m step) 10m≤R≤500m	—	—	E-6 ^{*2}	-55°C ~ 175°C	-55°C ~ 155°C	T1									
		±100	—	R=2m	—													
		±150	—	—	R=1m													
KRL9045	5W	±50	3m≤R≤9m (1m step) 10m≤R≤500m	—	—				E-6 ^{*2}	-55°C ~ 175°C	-55°C ~ 155°C	T1						
		±100	—	R=2m	—													
		±150	—	—	R=1m													
KRL11050	6W	±50	3m≤R≤9m (1m step) 10m≤R≤500m	—	—							E-6 ^{*2}	-55°C ~ 175°C	-55°C ~ 155°C	T1			
		±100	—	R=2m	—													
		±150	—	—	R=1m													
KRL15075	10W	±50	10m≤R≤500m	—	—										E-6 ^{*2}	-55°C ~ 175°C	-55°C ~ 155°C	T05
		±100	3m≤R≤9m (1m step)	R=2m	R=1m													
		±150	—	—	—													

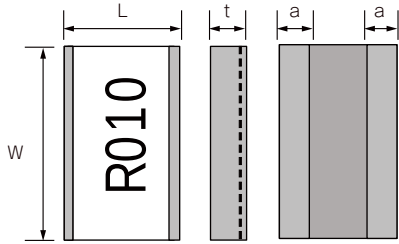
*1 We can meet your requirement of less than 1mΩ. Please contact our sales office.

*2 We can meet your requirement of resistance value outside of E-6 series. Please contact our sales office.

◆ Dimensions



D Type



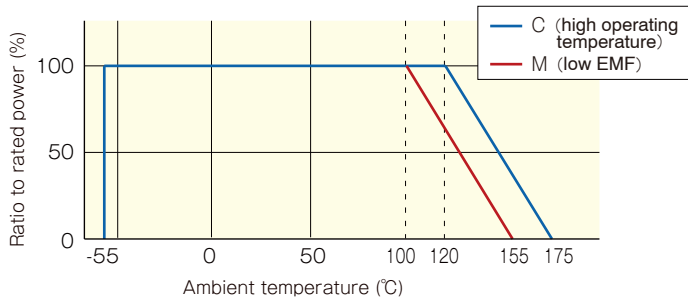
E Type

Type	Size (inch)	L	W	t	a
KRL1608 ^{*1}	0603	0.80±0.20	1.60±0.20	0.50±0.20	0.25±0.20(5mΩ~)
KRL2012	0805	1.25±0.20	2.00±0.20	0.50±0.20	0.30±0.20(2mΩ~)/0.55±0.20(1mΩ)
KRL3216	1206	1.60±0.20	3.20±0.20	0.50±0.20	0.30±0.20(2mΩ~)/0.55±0.20(1mΩ)
KRL5025	2010	2.50±0.20	5.00±0.20	0.50±0.20	0.55±0.20(2mΩ~)/0.90±0.20(1mΩ)
KRL6432	2512	3.10±0.20	6.30±0.20	0.50±0.20	0.50±0.20(2mΩ~)/1.20±0.20(1mΩ)
KRL7638	3015	3.80±0.20	7.60±0.20	0.50±0.20	0.60±0.20(2mΩ~)/1.35±0.20(1mΩ)
KRL9045	3518	4.50±0.20	9.00±0.20	0.50±0.20	0.70±0.20(2mΩ~)/1.60±0.20(1mΩ)
KRL11050	4320	5.00±0.20	11.00±0.20	0.50±0.20	0.80±0.20(2mΩ~)/1.60±0.20(1mΩ)
KRL15075	5930	7.50±0.20	15.00±0.20	0.65±0.20	1.10±0.20(2mΩ~)/2.75±0.20(1mΩ)

*1 KRL1608 doesn't have E Type

(unit : mm)

◆ Derating Curve



Mouser Electronics

Authorized Distributor

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Susumu:

[KRL7638-C-R068-F-T1](#) [KRL2012E-M-R033-F-T5](#) [KRL2012E-M-R003-F-T5](#) [KRL2012E-M-R150-F-T5](#) [KRL2012E-M-R470-F-T5](#) [KRL2012E-M-R007-F-T5](#) [KRL2012E-M-R010-F-T5](#) [KRL2012E-M-R100-F-T5](#) [KRL2012E-M-R009-F-T5](#) [KRL2012E-M-R005-F-T5](#) [KRL2012E-M-R220-F-T5](#) [KRL2012E-M-R330-F-T5](#) [KRL2012E-M-R006-F-T5](#) [KRL2012E-M-R068-F-T5](#) [KRL2012E-M-R002-G-T5](#) [KRL2012E-M-R004-F-T5](#) [KRL2012E-M-R047-F-T5](#) [KRL2012E-M-R001-J-T5](#) [KRL2012E-M-R022-F-T5](#) [KRL2012E-M-R015-F-T5](#) [KRL2012E-M-R008-F-T5](#) [KRL3216E-C-R020-F-T1](#) [KRL2012E-C-R100-F-T1](#) [KRL6432E-M-R100-F-T1](#) [KRL6432E-M-R008-F-T1](#) [KRL6432E-M-R010-F-T1](#) [KRL6432E-M-R015-F-T1](#) [KRL6432E-M-R002-G-T1](#) [KRL6432E-M-R007-F-T1](#) [KRL6432E-M-R022-F-T1](#) [KRL6432E-M-R009-F-T1](#) [KRL6432E-M-R047-F-T1](#) [KRL6432E-M-R006-F-T1](#) [KRL6432E-M-R005-F-T1](#) [KRL6432E-M-R003-F-T1](#) [KRL6432E-M-R033-F-T1](#) [KRL6432E-M-R004-F-T1](#) [KRL6432E-M-R200-F-T1](#) [KRL11050DC-R004-F-T1](#) [KRL6432E-M-R100-F-T5](#) [KRL3216E-M-R004-F-T5](#) [KRL2012E-C-R100-F-T5](#) [KRL3216E-C-R005-F-T5](#) [KRL3216D-C-R007-F-T5](#) [KRL3216E-C-R047-F-T5](#) [KRL3216E-C-R003-F-T5](#) [KRL6432D-C-R004-F-T5](#) [KRL6432E-C-R006-F-T5](#) [KRL3216E-C-R010-F-T5](#) [KRL11050D-C-R009-F-T1](#) [KRL11050E-C-R022-F-T1](#) [KRL11050D-C-R022-F-T1](#) [KRL11050E-C-R009-F-T1](#) [KRL2012D-M-R003-F-T5](#) [KRL2012E-C-R002-G-T5](#) [KRL2012E-C-R005-F-T5](#) [KRL2012E-C-R006-F-T5](#) [KRL2012E-C-R007-F-T5](#) [KRL3216E-C-R008-F-T1](#) [KRL6432E-C-R001-J-T1](#) [KRL6432E-C-R003-F-T1](#) [KRL6432E-C-R007-F-T1](#) [KRL3216E-C-R015-F-T1](#) [KRL3216E-C-R220-F-T1](#) [KRL3216E-C-R470-F-T1](#) [KRL6432E-C-R047-F-T1](#) [KRL3216E-C-R003-F-T1](#) [KRL3216E-C-R022-F-T1](#) [KRL3216E-C-R150-F-T1](#) [KRL6432E-C-R008-F-T1](#) [KRL3216E-C-R002-G-T1](#) [KRL3216E-C-R100-F-T1](#) [KRL6432E-C-R015-F-T1](#) [KRL6432E-C-R010-F-T1](#) [KRL6432E-C-R033-F-T1](#) [KRL2012E-C-R150-F-T5](#) [KRL3216E-C-R010-F-T1](#) [KRL6432E-C-R100-F-T1](#) [KRL3216E-C-R004-F-T1](#) [KRL3216E-C-R006-F-T1](#) [KRL6432E-C-R004-F-T1](#) [KRL3216E-C-R033-F-T1](#) [KRL6432E-C-R009-F-T1](#) [KRL3216E-C-R001-J-T1](#) [KRL3216E-C-R330-F-T1](#) [KRL6432E-C-R006-F-T1](#) [KRL6432E-C-R068-F-T1](#) [KRL3216E-C-R009-F-T1](#) [KRL6432E-C-R005-F-T1](#) [KRL3216E-C-R068-F-T1](#) [KRL6432E-C-R022-F-T1](#) [KRL3216E-C-R005-F-T1](#) [KRL3216E-C-R007-F-T1](#) [KRL6432E-C-R002-G-T1](#) [KRL3216E-C-R047-F-T1](#) [KRL2012E-C-R004-F-T5](#) [KRL2012E-C-R009-F-T5](#) [KRL2012E-C-R015-F-T5](#) [KRL2012E-C-R001-J-T5](#) [KRL2012E-C-R008-F-T5](#)