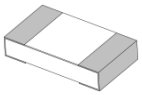
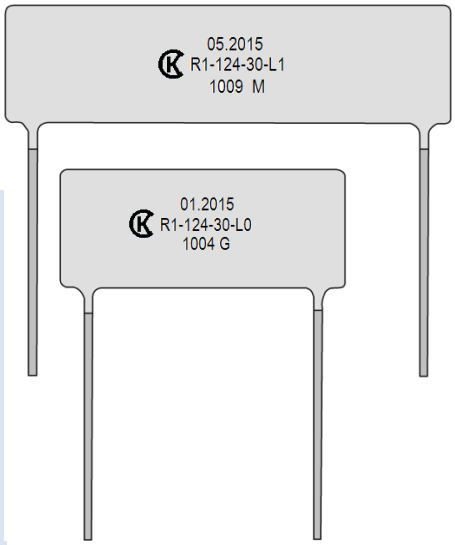
R1-124

High-voltage Resistor

FEATURES

- 40000 V capability



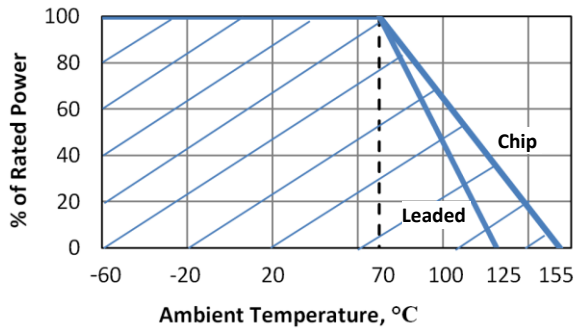


GENERAL SPECIFICATIONS

Operating Temp. Range:	-60 °C to 125 °C(leaded) to 155 °C(chip)
Load Life 70 °C/ 1000 h:	5 %
Max. Resistance Change at Rated Dissipation |ΔR/R max.| after 15000 h	10%
Package:	Leaded, chip
Process:	Thickfilm
Substrate Material:	96 % Al_2O_3
Coating:	Epoxy
Termination Finish:	Sn-Pb

Part Number	Power (W)	Max. Working Voltage (V)	Resistance Value[1], E24 Series(Ohms)	Resistance Tolerance (± %)
R1-124-10-C0	1	1000	1M-10M 11M-10G 11G-100G	20, 10, 5, 2 20, 10, 5 20, 10
R1-124-15-C0	1.5	4000	1M-10M 11M-10G 11G-100G	20, 10, 5, 2 20, 10, 5 20, 10
R1-124-05-L0	0.5	5000	1M-1G	10, 5, 2
R1-124-10-L0	1	10000	1M-2G	10, 5, 2
R1-124-30-L0	3	15000	1M-2G	10, 5, 2
R1-124-50-L0	5	20000	1M-3G	10, 5, 2
R1-124-10-L1	1	20000	1M-10M 11M-10G 11G-100G	20, 10, 5, 2 20, 10, 5 20, 10
R1-124-30-L1	3	30000	1M-10M 11M-10G 11G-100G	20, 10, 5, 2 20, 10, 5 20, 10
R1-124-50-L1	5	40000	1M-10M 11M-10G 11G-100G	20, 10, 5, 2 20, 10, 5 20, 10

(1)<100M measured at10 V, >100M measured at 100 V, >10G measured at 200 V

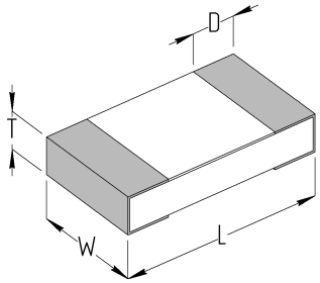


PART NUMBER CODE

R1-124	15	L0	5104	K	C
model	power 05 = 0.5 W 10 = 1 W 15 = 1.5 W 30 = 3 W 50 = 5 W	package Lx -leaded Cx-chip	value 5104 = 5.1MΩ 1009 = 100GΩ	tolerance G = 2 % J = 5 % K = 10 % M = 20 %	Packaging C-cartonbox T-tape & reel

603104, Russian Federation, Nizhny Novgorod, 6, Nartova St.
Tel.: +7(831)202-25-53Fax: +7(831)439-61-41
www.erkon-nn.com sales@erkon-nn.com

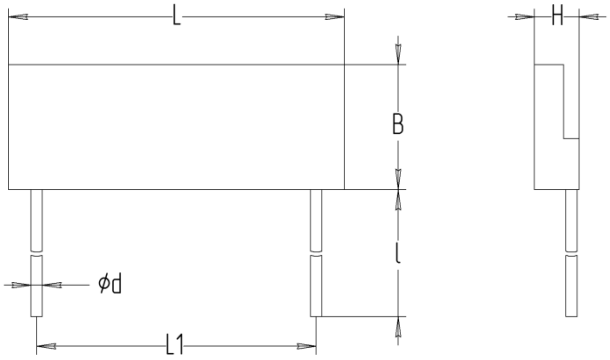
R1-124-xx-C0-xxxx-x



Part Number	Dimensions (mm) L	W	T	D	Mass (g)
R1-124-10-C0	6.3±0.2	3.2±0.2	0.6±0.2	0.75±0.45	0.1
R1-124-15-C0	10.0±0.2	0.5±0.2	0.6±0.2	1.0±0.5	0.5

Termination Style:3-sided wraparound

R1-124-xx-Lx-xxxx-x



Part Number	Dimensions (mm) L	B	H	L1	l	Ød	Mass (g)
R1-124-05-L0	$20.0^{+1.0}$	$8.0^{+0.6}$	2.2max	$18.0^{+1.0}$	18 min	0.5	0.5
R1-124-10-L0	$24.0^{+1.0}$	$15.0^{+0.6}$	2.8 max	$21.0^{+1.0}$	20 min	0.8±0.1	1.7
R1-124-30-L0	$30.0^{+1.0}$	$20.0^{+0.6}$	2.8 max	$26.0^{+1.0}$	25 min	0.8±0.1	2.8
R1-124-50-L0	$48.0^{+1.0}$	$20.0^{+0.6}$	2.8 max	$44.0^{+1.0}$	25 min	0.8±0.1	4.5
R1-124-10-L1	38.0^{+3}	13.0^{+3}	2.5±0.5	35.2±0.5	35.0±0.1	0.8±0.1	2.8
R1-124-30-L1	51.0^{+3}	15.0^{+3}	2.5±0.5	48.2±0.5	35.0±0.1	0.8±0.1	4.5
R1-124-50-L1	76.0^{+3}	15.0^{+3}	2.5±0.5	73.2±0.5	35.0±0.1	0.8±0.1	5.5

R1-124

High-voltage Resistor

PERFOMANCE CHARACTERISTICS

Test	Condition	ΔR max.
Robustness of termination[1]	IEC60115-1 (4.16)/ IEC 60068-2-21 Bending;Tensile	±5 %
Solderability	IEC60115-1 (4.17)/ IEC 60068-2-20 (235±5) °C; 2 s;solder bath method;SnPb40	Good tinning (>95 % covered, no visible damage)
Resistance to soldering heat	IEC60115-1 (4.18.2)/ IEC 60068-2-20 (260±5) °C;(5±1) s	± 5 %; no visible damage
Rapid change of temperature	IEC60115-1 (4.19)/ IEC 60068-2-14 30 min at -60 °C; 30 min at 125°C; 5 cycles (leaded) 30 min at -60 °C; 30 min at 155 °C; 5 cycles (chip)	±5 %
Vibration[1]	IEC60115-1 (4.22)/ IEC 60068-2-6 32 sweep cycles per direction;100 Hz to 2000 Hz;50 m/s^2	± 5 %
Damp heat, steady state	IEC60115-1 (4.24)/ IEC 60068-2-78 (40±2) °C;56 days;(93±3) % RH	± 20 %

(1) only R1-124-xx-Lx

All tests are carried out in accordance with the following specifications:

- IEC 60115-1 (clause),
- IEC 60068-2-xx (test method).

PACKAGING

For manual assembly: R1-124-xx-Lx-xxxx-x-C
carton box. R1-124-xx-Cx-xxxx-x-C

For automatic assembly: R1-124-xx-Cx-xxxx-x-T
tape and reel (>500 pcs).

MARKING(E24)

Nominal value			Marking		
1M	to	9.1M	1004	to	9104
10M	to	91M	1005	to	9105
100M	to	910M	1006	to	9106
1G	to	9.1G	1007	to	9107
10G	to	91G	1008	to	9108
100G			1009		

MOUNTING PROCEDURE

- **R1-124-xx-Cx:**can be used in automatic or manual assembly techniques,do not mount ‘face-down’.
- **R1-124-xx-Lx:** can be used only in manual assembly technique.