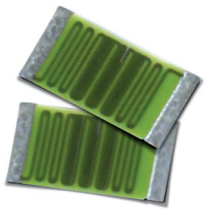
HVCV SERIES

High Voltage Low VCR Chip Resistors

Advantages



Our patented Micropen® precision printing technology provides superior precision, thick-film high voltage, low VCR surface mount resistors. Ohmcraft's Micropenned serpentine patterned resistors produce superior electrical characteristics:

- **Voltage Ratings to 3,000 Volts**
- **Resistance Values to 100 Megaohms**
- **Ultra High Stability**
- **Very Low Noise**
- **Tolerances to 1%**
- **TCR to 100 ppm/°C**
- **VCR to 2 ppm/V**
- **Custom Configurations**

Electrical Specifications

Case Size / Ratings	TCR (±ppm/°C)	Tolerance 1%	2%	5%	10%	20%
1206 330mW 1500V 5ppm/V	100	10M-100M	10M-100M	10M-100M	10M-100M	10M-100M
	200	10M-100M	10M-100M	10M-100M	10M-100M	10M-100M
2512 2W 3000V 2ppm/V	100	10M-100M	10M-100M	10M-100M	10M-100M	10M-100M
	200	10M-100M	10M-100M	10M-100M	10M-100M	10M-100M

The continuous maximum applied voltage cannot exceed the maximum power rating and is resistance value dependent.
For custom configurations, consult ohmcraftsales@exxelia.com.

How to Order

HVCV + [ ] + [ ] + [ ] + [ ] + [ ] + [ ]

Type

High-Voltage Low VCR Chips

Case Size

See dimension table.

TCR

K ±100ppm/°C

L ±200ppm/°C

Value

Resistance value expressed as a four digit number, where the first three numbers are the significant value, and the fourth number is the number of zeroes.

Tolerance

F ±1.0%

G ±2.0%

J ±5.0%

K ±10%

L ±20%

Termina. on

T Solderable wraparound ma. e tin Sn99.9 on Ni barrier, RoHS

B Solderable wraparound Sn63Pb37 solder over Ni barrier

Packaging options: Bulk, Tape & Reel or Flat Pack

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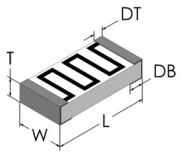
Chip Dimensions

Wrap-around

B and T Terminations



Case Size	Length	Width	Thickness (Max.)	DT	DB	Units
1206	0.126 +0.01/-0.005 3.20 +0.25/-0.13	0.063 ±0.005 1.60 ±0.13	0.030 0.76	0.010 ±0.005 0.25 ±0.13	0.020 ±0.010 0.51 ±0.25	inches mm
2512	0.250 +0.01/-0.005 6.35 +0.25/-0.13	0.125 ±0.005 3.18 ±0.13	0.030 0.76	0.020 ±0.010 0.51 ±0.25	0.024 ±0.010 0.61 ±0.25	inches mm

Typical Performance Characteristics

Test	Maximum ΔR
Short Time Overload	TBD
Load Life	TBD
Thermal Shock	TBD
Resistance to Soldering Heat	TBD

Parameter	Typical
Operating Temperature	-55°C to 150°C
TCR	Measured from 25°C to 75°C
Resistance Value	Measured at 100 VDC
VCR	Measured between 100VDC and 1000VDC

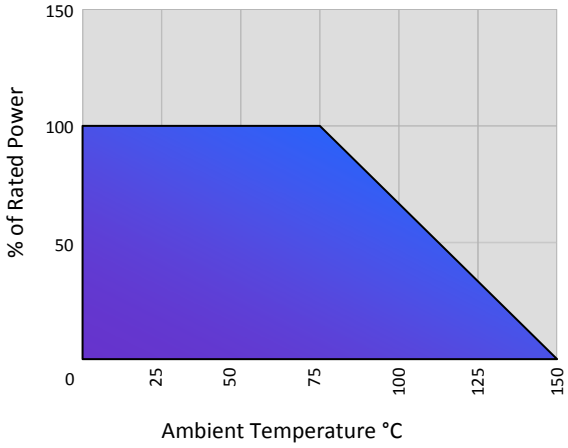
Material Construction

Resistive Element	Thick Film
Substrate	96% Alumina
Encapsulation	Epoxy
Termination	Tin over nickel barrier or lead solder over nickel barrier.

Tape and Reel Specifications

Parts are packaged in accordance with EIA-481 tape and reel specifications.

Custom Configurations Available Upon Request

Please consult with our knowledgeable sales staff for help specifying custom parts to meet your needs:

Power Derating Curve