

Shunt Chip Resistors (Metal)

Type: VLR / VLR-C

Sizes: 1206, 2010, 2512

Features:

- Metal strip resistance element or ceramic element (LR-C 2512)
- High wattage rating up to 3W
- Resistance values from 0.5mR to 100mR
- Low TCR available (50 ppm/K)
- Suitable for high temperature applications (up to 170°C)
- 100% rated power up to 80°C

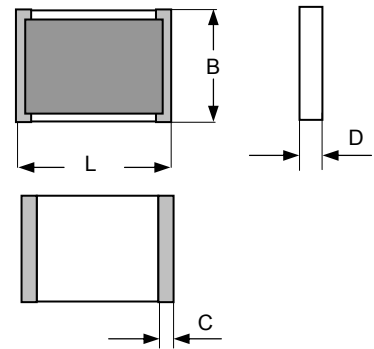


Dimensions:

Size	L	B	C	D
1206	3.20 ± 0.25	1.60 ± 0.10	0.98 ± 0.40	0.60 ± 0.20
2010	5.08 ± 0.25	2.54 ± 0.15	1.67 ± 0.63	0.60 ± 0.20
2512	6.35 ± 0.25	3.18 ± 0.25	1.17 ± 0.25 ... 2.68 ± 0.25 ¹⁾	0.45...1.40 ¹⁾

L = length, B = Width, D = Thickness, C = Width wrap around (in mm)

¹⁾ Depending on resistance value



Packaging:

Minimum order quantity: 1000 pieces per value

Blister tape

Reel diameter 180 mm (7")

Ordering Data:

Type – value – tolerance – TCR

Example: LR 2512 0R22 $\pm 1\%$ TCR 50

If no requirements for TCR, the highest value in table will be supplied.

Issue 03-2009

Shunt Chip Resistors (Metal)

Type: VLR / VLR-C

Sizes: 1206, 2010, 2512

Technical data – depending on size:

Size	Value	Tolerance	Power P ₇₀ (W)	TCR (ppm/K)	Coating
1206	1mR ... 10mR	1%; 3%; 5%	1	50	no coating
2010	1mR ... 10mR	1%; 3%; 5%	1.5	50	no coating
2512	0.5mR ... 0.75mR	1%; 3%; 5%	3	100	green or black ²⁾
	0.5mR ... 2mR	1%; 3%; 5%	2	50	green or black ²⁾
	1mR ... 3mR	1%; 3%; 5%	3	50	green or black ²⁾
	2.5mR ... 3mR	1%; 3%; 5%	1	150	green or black ²⁾
	4mR ... 5mR	1%; 3%; 5%	1	100	green or black ²⁾
	4mR ... 6mR	1%; 3%; 5%	2.5	50	green or black ²⁾
	6mR ... 7mR	1%; 3%; 5%	1	75	green or black ²⁾
	7mR ... 10mR	1%; 3%; 5%	2	50	green or black ²⁾
	11mR ... 20mR	1%; 3%; 5%	1	50	green or black ²⁾
C-2512	10mR ... 100mR	1%; 3%; 5%	1	100	

Max. operating current $I = \sqrt{P/R}$, max. operating Voltage $V = \sqrt{P \cdot R}$

²⁾ Green coating: Reflow soldering only
 Black coating: Wave or reflow soldering

Technical data - general:

Temperature range	-55°C ... +170°C
Solderability acc. to MIL-STD 202F Method 208H	245°C, 3s
Max. soldering temperature acc. to MIL-STD 202F Method 210E	260°C, 10s

Long term stability	Black coating	Green coating
Load Life (70°C, power 1.5h on, 0.5h off, 1000h; MIL-STD 202F M108H)	< 1%	< 1%
Thermal Shock (100x -55/150°C MIL-STD 202F Method 107G)	< 0.5%	< 1%
Short time overload (5x rated power, 5s)	< 0.5%	< 1%
Dry Heat (96h / 170°C)	< 1%	< 1%

More data on request