

Current Sensing Chip Resistors

Type: CS

Sizes: 0201, 0402, 0603, 0805, 0815, 0830, 1206, 1225, 2010, 2512

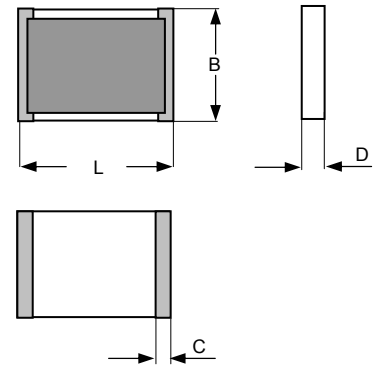
Features:

- Chip Resistors in thick film technology
- Pb-free terminations - RoHS compliant
- Low values
- Close tolerances - low TCR
- High power ratings up to 3W
- Long side terminations available



Dimensions:

Size	L	B	D	C
0201	0.58 ±0.05	0.29 ±0.05	0.23 ±0.05	0.15 ±0.05
0402	1.00 ±0.05	0.50 ±0.05	0.32 ±0.10	0.20 ±0.10
0603	1.60 ±0.10	0.80 ±0.10	0.45 ±0.10	0.30 ±0.20
0805	2.00 ±0.15	1.25 ±0.15	0.55 ±0.10	0.40 ±0.25
0815	2.00 ±0.20	3.75 ±0.20	0.60 ±0.10	0.40 ±0.20
0830	2.00 ±0.20	7.50 ±0.30	0.60 ±0.10	0.40 ±0.20
1206	3.05 ±0.15	1.55 ±0.15	0.55 ±0.10	0.40 ±0.25
1225	3.10 ±0.15	6.30 ±0.15	0.90 ±0.15	0.55 ±0.25
2010	5.00 ±0.20	2.45 ±0.15	0.60 ±0.15	0.50 ±0.25
2512	6.35 ±0.20	3.15 ±0.15	0.60 ±0.10	0.55 ±0.25



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

Packaging:

Minimum order quantity: 1000 pieces per value
Paper tape
Reel diameter 180 mm

Ordering Data:

Type – value – tolerance – TCR
Example: CS 2010 0R22 ±1% TCR 100

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

Issue 01-2009

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Technical data – depending on size and value:

Size	0201	0402	0603	0805	0815	0830	1206	1225	2010	2512
Power rating P ₇₀ (W)	0.05	0.0625	0.1	0.125 (0.25)*	1	2	0.25 (0.5)*	3	0.75 (1)*	1 (1.5)*
Resistance Range	0R05 ... 1R	0R05 ... 1R	0R02 ... 1R	0R02 ... 1R	0R01 ... 0R5	0R001 ... 0R35	0R01 ... 1R	0R003 ... 0R2	0R01 ... 1R	0R01 ... 1R
Tolerances	±1% ±2% ±5%	±0,5% ±1% ±2% ±5%	±0,5% ±1% ±2% ±5%	±0,5% ±1% ±2% ±5%	±1% ±2% ±5%	±1% ±2% ±5%	±0,5% ±1% ±2% ±5%	±0,5% ±1% ±2% ±5%	±0,5% ±1% ±2% ±5%	±0,5% ±1% ±2% ±5%
TCR (±ppm/K)	1000 ... 300	400 ... 50	600 ... 50	600 ... 50	300 ... 150	300 ... 100	600 ... 50	300 ... 100	600 ... 50	600 ... 50

Operating voltage: $U = \sqrt{P \cdot R}$

* Higher power rating electrical specification on request

Technical data - general:

Temperature range	-55°C ... +155°C
Climatic category acc. to EN 60068-1	55/155/56
Solderability acc. to MIL-STD-202F Meth. 208H	245°C, 3s
Max. soldering temperature acc. to MIL-STD-202F Meth. 210E (EN 60068-2-58)	260°C, 10s

Long term stability	
Load Life (70°C, power 1.5h on, 0.5h off, 1000h)	ΔR < 0.5%
Short time overload (2.5x rated power, 5s)	ΔR < 0.5%
Humidity (40°C, 95%RH, power 1.5h on, 0.5h off, 1000h)	ΔR < 0.5%
Dry Heat (96h / 155°C)	ΔR < 0.5%

More data on request

Specifications subject to change without notice

Issue 01-2009

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