

## Thin film Chip Resistors

Type: AR

Sizes: 0201, 0402, 0603, 0805, 1206, 1210, 2010, 2512

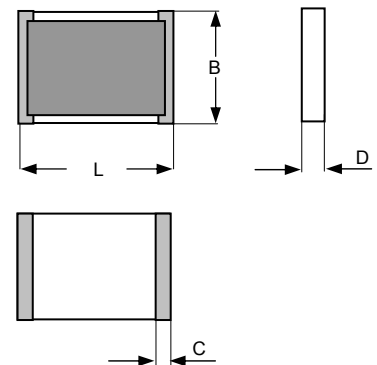
### Features:

- Chip Resistors in thin film technology
- Pb-free terminations - RoHS compliant
- NiCr-resistance element, passivated
- Close tolerances - low TCR



### Dimensions:

Size	L	B	D	C
0201	0.58 ±0.05	0.29 ±0.05	0.23 ±0.05	0.15 ±0.10
0402	1.00 ±0.05	0.50 ±0.05	0.30 ±0.05	0.20 ±0.10
0603	1.55 ±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
1206	3.05 ±0.15	1.55 ±0.15	0.55 ±0.10	0.35 ±0.25
1210	3.10 ±0.15	2.40 ±0.15	0.55 ±0.10	0.55 ±0.25
2010	4.90 ±0.15	2.40 ±0.15	0.55 ±0.10	0.50 ±0.25
2512	6.30 ±0.15	3.10 ±0.15	0.55 ±0.10	0.50 ±0.25



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

### Packaging:

Size	0201	0402	0603	0805	1206	1210	2010	2512
Pieces per tape	10,000		5,000				4,000	
Type of tape	Paper						Plastic	
Reel diameter	180 mm							

Minimum order quantity: 1000 pieces per value

### Ordering Data:

Type – value – tolerance – TCR

Example: AR 2010 2R2 ±0.5% TCR 50

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

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# SRT Resistor Technology

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Type: AR

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Technical data – depending on size and value:

Size	0201	0402	0603	0805	1206	1210	2010	2512
Power rating P <sub>70</sub> (mW)	31.25	62.5	62.5	100	125	125	250	500
* Higher power rating P <sub>70</sub>	-	-	100	125	250	250	-	-
Max. operating Voltage **	15 V	25 V	50 V	100 V	150 V	150 V	150 V	150 V
* Max. operating Voltage for higher power rating	-	-	50 V	150 V	200 V	200 V	-	-
Resistance range	50R ... 33K	10R ... 205K	2R ... 1M	1R ... 2M	1R ... 2M5	1R ... 2M5	1R ... 3M	1R ... 3M
Tolerances	0.5 ... 1%	0.01 ... 1%	0.01 ... 1%	0.01 ... 1%	0.01 ... 1%	0.01 ... 1%	0.01 ... 1%	0.01 ... 1%
TCR (ppm/K)	25 ... 50	5 ... 50	5 ... 50	5 ... 50	5 ... 50	5 ... 50	5 ... 50	5 ... 50

\* Resistance Range, R-Tolerance and TCR on request

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

### Technical data - general:

Temperature range	-55°C ... +155°C
Climatic category acc. to DIN EN 60068-1	55/155/56
Solderability acc. MIL-STD-202F Meth. 208H	245°C, 5s
Max. soldering temperature acc. MIL-STD-202F Meth. 210E (DIN EN 60068-2-58)	260°C, 10s

Long term stability	
Load Life (70°C, power 1.5h on, 0.5h off, 1000h)	$\Delta R < 0.2\%$
Short time overload (2.5x rated power, 5s)	$\Delta R < 0.5\%$
Humidity (40°C, 95%RH, power 1.5h on, 0.5h off, 1000h)	$\Delta R < 0.3\%$
Dry Heat (96h / 155°C)	$\Delta R < 0.2\%$

More data on request

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**SRT Resistor Technology GmbH**  
Ostlandstr. 31  
D-90556 Cadolzburg  
Germany

Fon: +49 (0)9103 / 7952-0  
Fax: +49 (0)9103 / 5128  
E-mail: [info@srt-restech.de](mailto:info@srt-restech.de)  
Internet: [www.srt-restech.de](http://www.srt-restech.de)