

## Power Chip Resistors

Type: CRW

Sizes: 1210, 1216, 2010, 2040, 2512, 4020

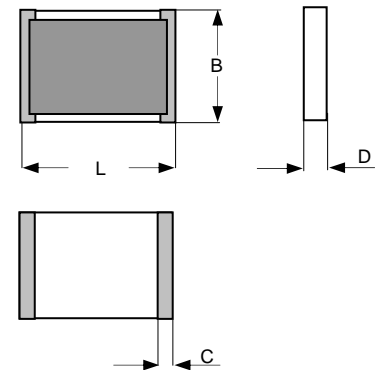


### Features:

- Chip Resistors in Thickfilm
- Contact areas Nickel-barrier/ tinned
- RF – versions with air-abrasive trimming
- Improved pulse power rating untrimmed

### Dimensions:

Sizes	L	B	D	C
1210	3.2 <sup>+0.2/-0.05</sup>	2.5 <sup>+0.2/-0.05</sup>	0.5 <sup>+0.2/-0.1</sup>	0.8 <sup>±0.2</sup>
1216	3.2 <sup>+0.2/-0.05</sup>	4.1 <sup>+0.2/-0.05</sup>	0.5 <sup>+0.2/-0.1</sup>	0.8 <sup>±0.2</sup>
2010	5.1 <sup>+0.2/-0.05</sup>	2.5 <sup>+0.2/-0.05</sup>	0.6 <sup>+0.2/-0.1</sup>	1.2 <sup>±0.2</sup>
2040	5.1 <sup>+0.2/-0.05</sup>	10.2 <sup>+0.2/-0.05</sup>	0.6 <sup>+0.2/-0.1</sup>	1.2 <sup>±0.2</sup>
2512	6.3 <sup>+0.2/-0.05</sup>	3.50 <sup>+0.2/-0.05</sup>	0.6 <sup>+0.2/-0.1</sup>	0.9 <sup>±0.2</sup>
4020	10.2 <sup>+0.2</sup>	5.1 <sup>+0.2</sup>	0.6 <sup>+0.2/-0.1</sup>	0.9 <sup>±0.2</sup>



L = Length. B = Width. D = Thickness. C = Width of wrap around (in mm)

### Packaging:

Bulk in plastic bags or tubes – minimum quantity 100 pieces per value

Blistertape acc. to IEC 60286-3 – minimum 1000 pieces per value

Reel diameter 180 mm or 330 mm

### Ordering Data:

Type – value – tolerance – TCR – packaging

Example: CRW 1216 100 R  $\pm$  1 % TK50 Tape 180 mm

If no requirements for TCR and taping are given, the standard value (highest value in table) will be supplied and packaging is bulk

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## Technical data – depending on size:

Size	1210	1216	2010	2040	2512 (M)	4020 (M)
Power rating $P_{70}$ (W) <sup>1)</sup> ( $P_{155} = 0$ W)	0.35	0.5	0.5	0.9	0.6	0.9
Working voltage $U_{-}$ . $U_{\text{eff}}$ (V) trimmed untrimmed (Tol. $\geq 5\%$ )	200 600	200 600	250 900	250 900	300 (1000) 1200 (2000)	500 (4000) 1500 (6000)

Ranges / Tolerances / TCR <sup>2)</sup> / VCR						
OR1 – 1R	TC250 5/10/20%	TC250 5/10/20%	TC250 5/10/20%	TC250 5/10/20%	TC250 5/10/20%	TC250 5/10/20%
1R – < 100R	TC100/250 1/.../20%	TC100/250 1/.../20%	TC100/250 1/.../20%	TC100/250 1/.../20%	TC100/250 1/.../20%	TC100/250 1/.../20%
100R – 100M	TC50/100 1/.../20%	TC50/100 1/.../20%	TC50/100 1/.../20%	TC50/100 1/.../20%	TC50/100 0.5/.../20%	TC50/100 0.5/.../20%

<sup>1)</sup> Load acc. To DIN 45921 on PCB. limited by temperature of solder area (competitor data often too high)  
With suitable heat dissipation higher power rating is possible.  
Diagrams for over temperatures available on request.

<sup>2)</sup> TC/50: Temperature range + 25°C...+ 125°C

Zero-Ohm-Jumper: :< 50 mOhm. TCR max. + 4000

M at 2512/4020: Meander structure with higher working voltage in bracket.

Higher power dissipation, other sizes and specifications on request.

## Technical data – general:

Temperature range	-55°C ... +155°C
Climatic category acc. to IEC 60068	55/155/56
Solderability acc IEC 60068 T2-20. Ta Meth. 1	235°C 2 s
Max. soldering temperature acc. IEC 60068 T2-20 Tb M. 1A	260°C 10 s

Long term stability	10R – 100M	<10R
Storage 125°C/1000h	<0.5%	<1%
Storage 155°C/1000h	<1%	<2%
Load $P_{70}$ /70°C/1000h	<1%	<2%
Short term overload	<0.25%	<0.5%
Damp heat (56d/40°C/96%)	<0.5%	<1%

Data not specified according CECC 40401-802

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