

Power Chip Resistors

Type: CRW

Sizes: 1210, 1216, 2010, 2040, 2512

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 | $3.2^{+0.2}_{-0.05}$ | $2.5^{+0.2}_{-0.05}$ | $0.5^{+0.2}_{-0.1}$ | $0.8^{\pm 0.2}$ |
| 1216 | $3.2^{+0.2}_{-0.05}$ | $4.1^{+0.2}_{-0.05}$ | $0.5^{+0.2}_{-0.1}$ | $0.8^{\pm 0.2}$ |
| 2010 | $5.1^{+0.2}_{-0.05}$ | $2.5^{+0.2}_{-0.05}$ | $0.6^{+0.2}_{-0.1}$ | $1.2^{\pm 0.2}$ |
| 2040 | $5.1^{+0.2}_{-0.05}$ | $10.2^{+0.2}_{-0.05}$ | $0.6^{+0.2}_{-0.1}$ | $1.2^{\pm 0.2}$ |
| 2512 | $6.3^{+0.2}_{-0.05}$ | $3.5^{+0.2}_{-0.05}$ | $0.6^{+0.2}_{-0.1}$ | $0.9^{\pm 0.2}$ |

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

Packaging:

Bulk or Tape acc. to IEC 286-3/EIA481-1-A
reel diameter 180 mm or 330 mm

Tape width: 8 mm 1210
12 mm 1216, 2010, 2512
16 mm 2040

Minimum quantity bulk: 100 pieces per value

Minimum quantity tape: 1000 pieces per value

Ordering data:

Type – Value – Tolerance – TCR – Packaging (if not bulk)

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

If no TCR is specified in the order, the higher value in the data-table will be delivered

SRT Resistor Technology

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Technical data – depending on size:

| Size | 1210 | 1216 | 2010 | 2040 | 2512 |
|---|------------|------------|------------|------------|-------------|
| Power rating P_{70} (W) ¹⁾ ($P_{155} = 0$ mW) | 0.35 | 0.5 | 0.5 | 0.9 | 0.6 |
| Working voltage U_{-} , U_{eff} (V) trimmed untrimmed | 200 600 | 200 600 | 250 900 | 250 900 | 300 1200 |

| Ranges/TCR/Tolerance ²⁾ : | | |
|--------------------------------------|------------|-----------|
| 0R1 – < 1R | TC 250 | 10/20 % |
| 1R – < 10R | TC 100/250 | 5/10/20 % |
| 10R – 10M | TC 50/100 | 1/./20 % |

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

Other sizes and specifications as special product on request

Technical data – general:

| | |
|--|------------------|
| Temperature range | -55°C ... +155°C |
| Climatic category acc. to IEC 68 | 55/155/56 |
| Solderability ³⁾ | 235°C 2 s |
| Max. soldering temperature ⁴⁾ | 260°C 30 s |

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

Data not specified: DIN 45 921, part 402 resp. CECC 40401-802

1) Load acc. to DIN 45 921 on PCB, limited by temperature of solder area (competitor data often too high)
With suitable heat dissipation higher power rating is possible
Diagrams for overtemperatures available on request

2) TC 50: Temperature range +25°C .. +125°C

3) DIN IEC 68 T2-20, Ta Meth. 1

4) DIN IEC 68 T2-20, Tb Meth. 1A

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