

Precision Chip Resistors

Type: **CMF**

Sizes: **0603, 0805, 1206, 2512**

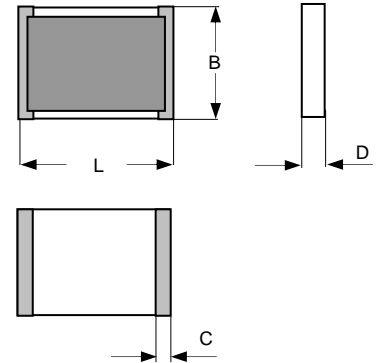
Features:

- Chip Resistors in Thin-film Technology
- Contact areas Nickel-barrier / matte tin
- Resistance element resin-passivated
- Close tolerances (0.05%)
- Low TCR (5 ppm/K)
- Extreme low noise



Dimensions:

Size	L	B	D	C
0603	1.6 ± 0.1	0.8 ± 0.1	0.45 ± 0.1	0.3 $+0.2$
0805	2.0 ± 0.1	1.25 ± 0.1	0.55 ± 0.1	0.4 ± 0.2
1206	3.2 ± 0.2	1.6 ± 0.15	0.55 ± 0.1	0.5 ± 0.2
1210 ⁰⁾	3.2 ± 0.2	2.5 ± 0.2	0.55 ± 0.1	0.5 $+0.2$
2010 ⁰⁾	5.0 ± 0.2	2.5 ± 0.2	0.55 ± 0.1	0.5 $+0.2$
2512	6.3 ± 0.2	3.2 ± 0.2	0.55 ± 0.2	0.5 ± 0.2



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

⁰⁾ Size 1210 and 2010 on request only

Packaging:

Bulk in plastic bags - minimum quantity 100 pieces per value
Tape according IEC 60286-3 – minimum quantity 1000 pieces per value
Reel diameter 180 mm or 330 mm

Ordering data:

Type – value – tolerance – TCR – packaging
Example: CMF 0805 100K $\pm 0.1\%$ TCR15 Tape 180 mm

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

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Technical data – depending on size:

Size	0603	0805	1206	2512
Power rating P_{70} (mW) ($P_{125} = 0$ mW)	65	125	250	750
Working voltage U_{-} , U_{eff} (V)	75	100	200 ¹⁾	300 ²⁾

Ranges	Tolerance / TCR ³⁾			
5R1 – <10R	–	–	1% TCR 50	1% TCR 50
10R – <47R	0.1 ... 1% TCR 25/50	0.1 ... 1% TCR 25/50	0.1 ... 1% TCR 25/50	0.1 ... 1% TCR 25/50
47R – <100R	0.1 ... 1% TCR 10 ... 50	0.1 ... 1% TCR 10 ... 50	0.1 ... 1% TCR 10 ... 50	0.1 ... 1% TCR 10 ... 50
100R – 332K	0.1 ... 1% TCR 5 ... 50	0.05 ... 1% TCR 5 ... 50	0.05 ... 1% TCR 5 ... 50	0.05 ... 1% TCR 5 ... 50
>332K – 1M	–	0.05 ... 1% TCR 5 ... 50	0.05 ... 1% TCR 5 ... 50	0.05 ... 1% TCR 5 ... 50
>1M – 2M	–	–	0.1 ... 1% TCR 10 ... 50	0.1 ... 1% TCR 5 ... 50
>2M – 5M	–	–	–	0.1 ... 1% TCR 5 ... 50
>5M – 15M	–	–	–	0.1 ... 1% TCR 10 ... 50

Tolerance-Classes: 0,05 - 0,1 – 0,25 – 0,5 – 1%

TCR-Classes: 5, 10, 15, 25, 50 ppm/K

¹⁾ 400 V for special applications

²⁾ 1000 V for special applications

³⁾ TCR 5/10/15: in temperature range +25°...+85°C

Technical data - general:

Temperature range	-55°C...+125°C
Climatic category acc. to DIN EN 60068-1	55/125/56
Solderability acc. DIN EN 60068-2-58 (lead-free and lead-containing)	250°C 3s
Max. soldering temperature acc. DIN EN 60068-2-58	260°C 10s

Long term stability	47R – 15M	<47R
Storage 125°C/1000h	<0.15%	<0.25%
Load P_{70} /70°C/1000h	<0.1%	<0.25%
Damp heat (56d/40°C/96%)	<0.15%	<0.5%

Not specified data according EN 140401-801 (CECC 40401-801)

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