

# Precision Chip Resistors

Type: CMF  
Sizes: 0603, 0805, 1206, 2512



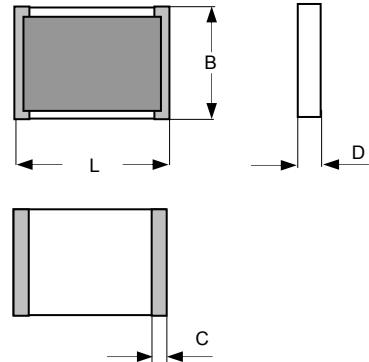
## Features:

- Chip Resistors in Thinfilm 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 $\pm 0.1$	0.8 $\pm 0.1$	0.45 $\pm 0.1$	0.3 $^{+0.2}$
0805	2.0 $\pm 0.1$	1.25 $\pm 0.1$	0.45 $\pm 0.1$	0.4 $^{+0.2}$
1206	3.2 $\pm 0.2$	1.6 $\pm 0.15$	0.55 $\pm 0.1$	0.5 $^{+0.2}$
1210 <sup>0)</sup>	3.2 $\pm 0.2$	2.5 $\pm 0.2$	0.55 $\pm 0.1$	0.5 $^{+0.2}$
2010 <sup>0)</sup>	5,0 $\pm 0.2$	2,5 $\pm 0.2$	0,55 $\pm 0.1$	0,5 $^{+0.2}$
2512	6.3 $\pm 0.2$	3.2 $\pm 0.2$	0.55 $\pm 0.2$	0.5 $^{+0.2}$



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

<sup>0)</sup> 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 <sup>1)</sup>	300 <sup>2)</sup>

Ranges	Tolerance / TCR <sup>3)</sup>			
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	0.05 ... 1% TCR 5 ... 50
>2M – 5M	–	–	–	0.05 ... 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

<sup>1)</sup> 400 V for special applications

<sup>2)</sup> 1000 V for special applications

<sup>3)</sup> TCR 5: in temperature range 0°C ... +70°C

## Technical data - general:

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

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

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

Specifications subject to change without notice

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