

Precision High Value Chip Resistors

Type: CHM, CRM

Sizes: 0805, 1206, 1210, 2010, 2512, 4020

Features:

- Meander structured High Value Chip Resistors in Thickfilm
- Low temperature and voltage dependency
- High Working Voltage up to 6000 V
- Suitable for high vacuum applications – no organics
- High temperature application up to 300°C possible (CHM-HT)
- Non-magnetic (CHM only)

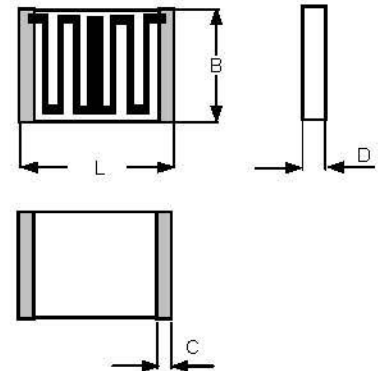


Contact areas:

- CHM: PtAg for conductive glueing and soldering (non-magnetic, high temp. appl.)
- CRM: Nickel-barrier / matte tin

Dimensions:

Size	L	B	D	C
0805	2.00 ^{+0.15/-0.05}	1.25 ^{+0.15/-0.05}	0.40 ^{+0.15/-0.05}	0.3 ^{+0.2/-0.1}
1206	3.20 ^{+0.15/-0.05}	1.50 ^{+0.2/-0.05}	0.40 ^{+0.15/-0.05}	0.3 ^{+0.2/-0.1}
1210	3.20 ^{+0.15/-0.05}	2.50 ^{+0.2/-0.05}	0.50 ^{+0.15/-0.05}	0.8 ^{±0.2}
2010	5.10 ^{+0.15/-0.05}	2.50 ^{+0.2/-0.05}	0.60 ^{+0.20/-0.1}	1.2 ^{±0.2}
2512	6.30 ^{+0.15/-0.05}	3.50 ^{+0.2/-0.05}	0.60 ^{+0.15/-0.05}	0.9 ^{±0.2}
4020	10.20 ^{+0.20/-0.05}	5.10 ^{+0.2/-0.05}	0.60 ^{+0.20/-0.1}	0.9 ^{±0.2}



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

Packaging:

Bulk in plastic bags – minimum quantity 30 pieces per value
 Blister tape acc. to IEC 60286-3 – minimum 500 pieces per value
 Reel diameter 180 mm or 330 mm

Ordering Data:

Type – value – tolerance – TCR – packaging
 Example: CHM 2512 10G ±10% TCR 100 Tape 180 mm

Not trimmed parts are indicated by the extension "NA" in the order code:

Type – value – tolerance – NA – TCR - packaging
 Example: CHM 2512 10G ±10% NA TCR 100 Tape 180 mm

If no requirements for TCR and taping are given, the highest value in table will be supplied and packaging is bulk. Standard measuring voltage is 10V, other measuring voltages on request.

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Technical data – depending on size:

Size	0805	1206	1210	2010	2512	4020
Power rating P_{70} (mW) ($P_{155} = 0$ mW)	125	250	350	500	1000 ¹⁾	1500 ¹⁾
Working voltage U_{-} , U_{eff} (V) trimmed untrimmed (Tol. > 5%)	200 600	600 1000	1000 1200	1500 2000	2000 3000	4000 6000

Ranges / Tolerances / TCR ²⁾ / VCR ³⁾						
100K – 100M	0.5/1/2/5/10% TC25/50/100 50 ppm/V	0.5/1/2/5/10% TC25/50/100 50 ppm/V	0.5/1/2/5/10% TC25/50/100 25 ppm/V	0.5/1/2/5/10% TC25/50/100 25 ppm/V	0.5/1/2/5/10% TC25/50/100 10 ppm/V	0.25/ ... /10% TC25/50/100 10 ppm/V
>100M – 1G	2/5/10/20% TC50/100/250 250 ppm/V	2/5/10/20% TC50/100/250 100 ppm/V	1/2/5/10/20% TC25/50/100 50 ppm/V	1/2/5/10/20% TC25/50/100 50 ppm/V	1/2/5/10/20% TC25/50/100 25 ppm/V	0.5/ ... /20% TC25/50/100 10 ppm/V
>1G – 10G	5/10/20% TC100/250 500 ppm/V	5/10/20% TC100/250 250 ppm/V	2/5/10/20% TC50/100 100 ppm/V	2/5/10/20% TC50/100 100 ppm/V	2/5/10/20% TC50/100 100 ppm/V	1/2/5/10/20% TC50/100 25 ppm/V
>10G – 100G	10/20/30% TC1000/2000 1000 ppm/V	10/20/30% TC500/1000 1000 ppm/V	5/10/20/30% TC500/1000 500 ppm/V	5/10/20/30% TC250/500 500 ppm/V	5/10/20/30% TC250/500 250 ppm/V	2/5/10/20/30% TC250/500 100 ppm/V
>100G – 1T	–	10/20/30% TC1000/2000 2000 ppm/V	5/10/20/30% TC1000/2000 1000 ppm/V	5/10/20/30% TC500/1000 1000 ppm/V	5/10/20/30% TC500/1000 500 ppm/V	5/10/20/30% TC500/1000 250 ppm/V
>1T – 10T	–	–	–	–	10/20/30% TCR/VCR on request	10/20/30% TCR/VCR on request

¹⁾ At continuous power dissipation the dimensions of solder-pads have to secure sufficient heat-conduction

²⁾ TCR: in ppm/K; TCR 25/50: Temperature range +25°C...+85°C

³⁾ VCR: typical values

Lower values of tolerance, TCR and VCR on request and agreement

Technical data – general:

Temperature range	-55°C ... +155°C
Climatic category acc. to EN 60068-1	55/155/56
Solderability acc. to EN 60068-2-58 (lead-free and lead-containing) ⁴⁾	250°C, 3s
Max. soldering temperature acc. to EN 60068-2-58	260°C, 10s

Extended temperature range up to 300°C possible- see datasheet: "High temperature chip resistors"

Long term stability	< 1G	< 10G	≥ 10G
Load Life 70°C/1000h	< 0.25%	< 0.5%	< 1%
Storage 125°C/1000h	< 0.5%	< 1%	< 2%
Max voltage/1000h	< 0.5%	< 1%	< 2%

⁴⁾ Up to 6 months after shipment; longer at storage in Nitrogen

Data not specified according to EN 140401-802 (CECC 40401-802)