

Trimmable Chip Resistors

Types: CRA/CRB

Sizes: 0603, 0805, 1206, 1210, 1216, 1216H

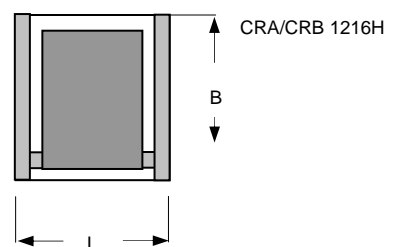
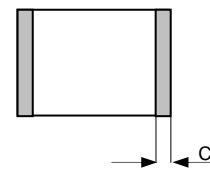
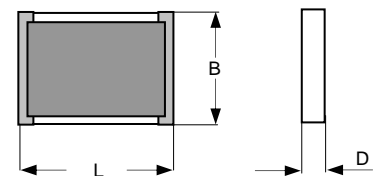
Features:

- Trimmable Chip Resistors in Thickfilm (without pre-trimm)
- CRA: Contact areas Nickel-barrier / matte-tinned glass-passivated, for soldering
- CRB: Contact areas PtAg – non-magnetic unpassivated, for soldering and conductive glueing
- Suitable for Laser and Air-abrasive trimming
- High trimming ratios by special geometries
- High temperature application possible (up to 300°C; CRB only)
- Suitable for high vacuum applications – no organics



Dimensions:

Size	L	B	D	C
0603	1.50 ^{+0.15/-0.05}	0.80 ^{+0.15/-0.05}	0.40 ^{+0.15/-0.05}	0.2 ^{+0.2/-0.1}
0612	1.50 ^{+0.2/-0.05}	3.20 ^{+0.15/-0.05}	0.40 ^{+0.15/-0.05}	0.3 ^{+0.2/-0.1}
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}
1216	3.2 ^{+0.2/-0.05}	4.1 ^{+0.2/-0.05}	0.5 ^{+0.2/-0.1}	0.4 ^{±0.2}
1216H	3.2 ^{+0.2/-0.05}	4.1 ^{+0.2/-0.05}	0.5 ^{+0.2/-0.1}	0.4 ^{±0.2}



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

Packaging:

Bulk in plastic bags – minimum quantity 100 pcs/value
 Blister tape acc. to IEC 60286-3 – minimum 1000 pcs/value
 Reel diameter 180 mm or 330 mm

Ordering Data:

Type – value – tolerance – TCR – packaging

Example: CRA 1216 100R ± 20% - TCR 50 - Tape 180 mm

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

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Technical data – depending on size:

Size	0603	0805	1206	1210	1216	1216H
Power rating P ₇₀ (mW) (P ₁₅₅ = 0 mW)	100	125	250	350	400	400
Working voltage U ₋ , U _{eff} (V) ³⁾ trimmed (trimming by user) untrimmed (as delivered)	75 220	100 300	200 600	200 600	200 600	200 600
Trimming ratios (single cut) ¹⁾	1,5	1,5	2	3	4	8

Ranges / Tolerances ⁴⁾ / TCR ²⁾						
1R – < 10R	10/20/30% TC250	10/20/30% TC250	10/20/30% TC250	10/20/30% TC250	10/20/30% TC250	10/20/30% TC250
10R – 10M	5/10/20/30% TC50/100	5/10/20/30% TC50/100	5/10/20/30% TC50/100	5/10/20/30% TC50/100	5/10/20/30% TC50/100	5/10/20/30% TC50/100

¹⁾ Detailed information on request.

²⁾ TC50: Temperature range +25°C...+85°C; TK50 not in the resistance range < 100R

³⁾ Continuous operating voltage: $U = \sqrt{P \cdot R}$

⁴⁾ Non-symmetric tolerances also available (e.g. -0/+20%)

Technical data – general:

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

Extended temperature range up to 300°C possible (CRB only) - see datasheet: High temperature chip resistors

Long term stability	10R – 10M	<10R
Storage 125°C/1000h	<0,5%	<1%
Storage 155°C/1000h	<1%	<2%
Load P ₇₀ 70°C/1000h	<1%	<2%
Damp heat (56d/40°C/96%)	<0,5%	<1%

³⁾ CRB: Up to 6 months after shipment; longer at storage in Nitrogen
Data not specified according EN 140401-802 (CECC 40401-802)