

Precision Thick Film Chip

CRW1210, CRW1216, CRW2010, CRW2040, CRW2512, CRW4020

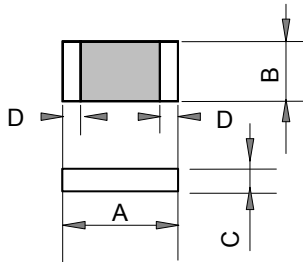


Features and Applications

- Resistances from 0.1ohm to 100Mohm
- Power Rating 0.35 to 2.0Watt
- Resistance Tolerances to $\pm 0.5\%$
- TCR's to $\pm 50\text{ppm/K}$
- Thick Film Resistance Element
- Size: 1210 / 1216 / 2010 / 2040 / 2512 / 4020

Applications includes industrial measurement, control electronics and automatic test equipment.

Dimensional Specifications (mm)



	CRW1210	CRW1216	CRW2010	CRW2040	CRW2512	CRW4020
A	3.2 (+0.2/-0.05)	3.2 (+0.2/-0.05)	5.1 (+0.2/-0.05)	5.1 (+0.2/-0.05)	6.3 (+0.15/-0.05)	10.2 (+0.15/-0.05)
B	2.5 (+0.2/-0.05)	4.1 (+0.2/-0.05)	2.5 (+0.2/-0.05)	10.2 (+0.2/-0.05)	3.5 (+0.2/-0.05)	5.1 (+0.2/-0.05)
C	0.5 (+0.2/-0.1)	0.5 (+0.2/-0.1)	0.6 (+0.2/-0.1)	0.6 (+0.2/-0.1)	0.6 (+0.15/-0.05)	0.6 (+0.15/-0.05)
D	0.8 (± 0.2)	0.8 (± 0.2)	1.2 (± 0.2)	1.2 (± 0.2)	0.9 (± 0.2)	0.9 (± 0.2)

Ordering Information

Type	TCR	Resistance	Tolerance	Packaging
CRW1210	C	100 ohm	F	Z01
CRW1216	C(50ppm/degC)		D (0.5%)	Z00 (Bulk)
CRW2010	A(100ppm/degC)		F (1%)	Z01 (Tape)
CRW2040	H(250ppm/degC)		J (5%)	
CRW2512			K (10%)	
CRW4020				

Minimum quantity Bulk: 100pcs
 Minimum quantity Tape & Reel: 500pcs

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Specifications

Type	CRW1210	CRW1216	CRW2010	CRW2040	CRW2512 (M)	CRW4020 (M)
Power Rating (W) ¹	0.35	0.5	0.75	2.0	1.0 / 1.5 ³	2.0
Working Voltage (VAC)	Trimmed	200	200	250	300	500
	Untrimmed (≥5% tol.)	600	600	900	900	1500

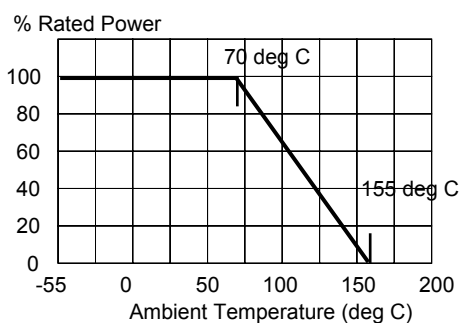
Resistance Value(Ω)	Tolerance Available (%)					
	Temperature Coefficients Available (± ppm / °C) ²					
0.1Ω < 1Ω	5 ~ 10% 250	5 ~ 10% 250	5 ~ 10% 250	5 ~ 10% 250	5 ~ 10% 250	5 ~ 10% 250
1Ω < 100Ω	1 ~ 10% 100 / 250	1 ~ 10% 100 / 250	1 ~ 10% 100 / 250	1 ~ 10% 100 / 250	1 ~ 10% 100 / 250	1 ~ 10% 100 / 250
100Ω < 100M	1 ~ 10% 50 / 100	1 ~ 10% 50 / 100	1 ~ 10% 50 / 100	1 ~ 10% 50 / 100	0.5 ~ 10% 50 / 100	0.5 ~ 10% 50 / 100

¹ W @ 70 °C / 0W @ 155 °C² 50 ppm: +25 °C to +125 °C³ Structure (M) with higher working voltage

Specification	Value
Temperature Range	- 55°C to + 155°C
Climactic Category	55 / 155 / 56
Solderability	250°C / 3s
Max. Soldering Temperature	260°C / 10 s

Long Term Stability	Max ΔR	
	< 10Ω	10Ω – 100M
Storage 125°C / 1000h	± 1%	± 0.5%
Storage 155°C / 1000h	± 2%	± 1%
Load Life / P =70% / 70°C 1000h	± 2%	± 1%
Short term overload	± 0.5%	± 0.25%
Humidity / 96%RH / 40°C / 56 days	± 1%	± 0.5%

Power Derating



Note

1. The performance of an short time overload test is the specification about one time overload test. Please do not apply the continuous pulse exceeding rated power.

2. When you apply continuous pulse, please care not to exceed the range of a derating curve and not to exceed maximum working voltage and maximum working current.

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