



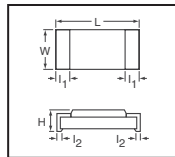
## CRT Series Thin Film Precision Chip Resistors

.1% 1/10W 0603, .1% 1/8W 0805 and 1206 Series



The CRT series of SMD precision chip resistors offer Absolute Tolerances and TCRs as low as 0.01% and 5ppm respectively. They are packaged in industry standard chip sizes ranging from 0402 to 1206 formats and are used in a wide range of circuits requiring very low noise and high accuracy.

Operating Temperature Range: -55 ~ 155°C  
Temperature Coefficient: 5 ~ 50ppm/°C



Dimensions (mm)	Series		
	0603	0805	1206
L	1.55 ± 0.10	2.00 ± 0.15	3.05 ± 0.15
W	0.80 ± 0.10	1.25 ± 0.15	1.55 ± 0.15
H	0.45 ± 0.15	0.55 ± 0.10	0.55 ± 0.10
l1	0.30 ± 0.20	0.30 ± 0.20	0.42 ± 0.20
l2	0.30 ± 0.20	0.40 ± 0.25	0.35 ± 0.25

Resistance Values (Ω) – 0603, 0805 and 1206 Series			
Value (Code)	Value (Code)	Value (Code)	Value (Code)
10(10R0)	10K (1002)	100K (1003)	1.0M (1004)§

§ Value not available in 0603 series

Description	Value Range (Ω)	Working Voltage (Maximum)	Overload Voltage (Maximum)	Digi-Key Part No.†	Cut Tape Pricing			Digi-Key Part No.†	Tape and Reel Pricing 5,000	Bourns Part No.
					1	10	100			
0603, .1%, 1/10W	10 ~ 100K	50V	100V	CRT0603-BY-(Code)ELFCT-ND	.25	1.56	11.70	CRT0603-BY-(Code)ELFTR-ND	98.00/M	CRT0603-BY-(Code)ELF
0805, .1%, 1/8W	10 ~ 1.0M	100V	200V	CRT0805-BY-(Code)ELFCT-ND	.28	1.75	13.14	CRT0805-BY-(Code)ELFTR-ND	110.00/M	CRT0805-BY-(Code)ELF
1206, .1%, 1/8W	10 ~ 1.0M	150V	300V	CRT1206-BY-(Code)ELFCT-ND	.35	2.23	16.74	CRT1206-BY-(Code)ELFTR-ND	140.00/M	CRT1206-BY-(Code)ELF

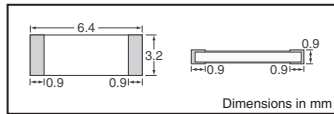
† For complete part number, substitute the corresponding code from the Resistance Value chart for (Code).

## CRA Series High Power Current Sense Chip Resistors

1% 3W 2512 Series



The CRA series of SMD power chip resistors are used for current measurement and circuit protection applications. It is rated to 3 Watts of power in an industry standard 2512 package with a resistance range of 10mΩ ~ 100mΩ and a TCR of ±75ppm.



Resistance Values (Ω)	
Value (Code)	Value (Code)
.01 (R010)	.05 (R050)
.02 (R020)	.08 (R080)
.04 (R040)	.10 (R100)

Power Rating @ 70°C	Insulation Resistance	Operating Temperature Range	Temperature Coefficient	Tolerance
3W	> 100MΩ	-55°C ~ 170°C	±75ppm/°C	±1%

Description	Value Range (Ω)	Digi-Key Part No.†	Cut Tape Pricing			Digi-Key Part No.†	Tape & Reel Pricing 4,000	Bourns Part No.
			1	10	100			
1%, 3W, 2512	.01 ~ .10	CRA2512-FZ-(Code)ELFCT-ND	.49	3.12	23.40	CRA2512-FZ-(Code)ELFTR-ND	195.00/M	CRA2512-FZ-(Code)ELF

† For complete part number, substitute the corresponding code from the Resistance Value chart for (Code).

## CHF Series Power RF Chip Resistors/Terminators

5% 1206, 190104, 2010, 3523, 3725 Series



The CHF RF Power Resistors are used in high power 50Ω terminations with excellent RF performance characteristics. Their typical function is in a "Fail Safe" mode to dissipate the transmission power in High Power RF Amplifiers. The CHF series is manufactured using thick film technology on special ceramics.

Applications: Radio/TV, telecommunications (WCDMA, CDMA, GSM), wireless technologies (Wi Max), radar and medical equipment

Dimensions in mm

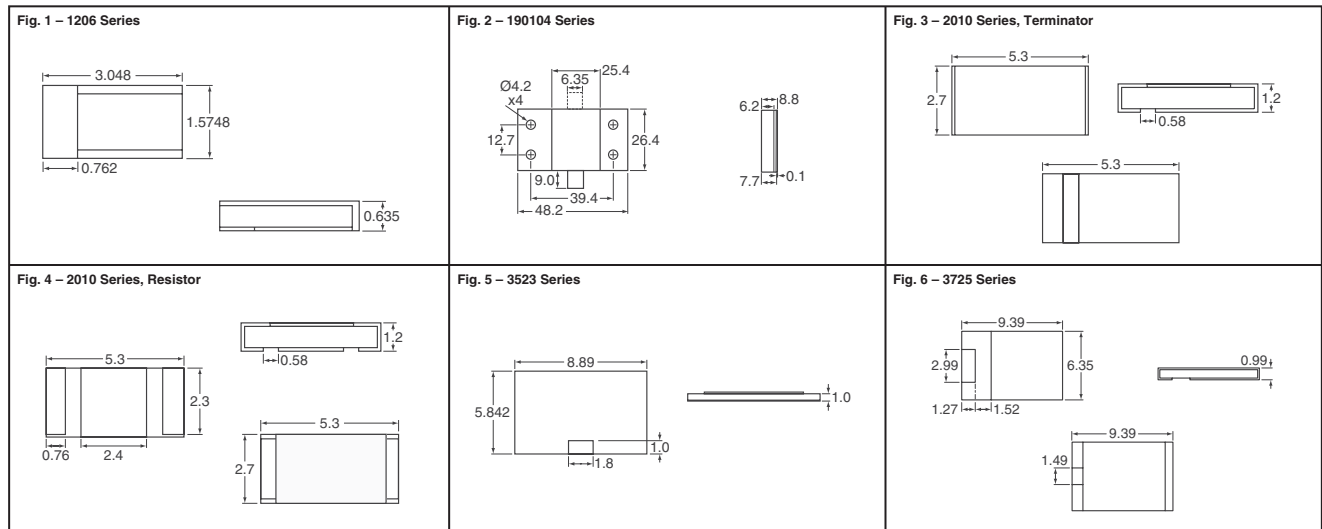


Fig.	Description	Power Rating @ 70°C	Resistance Value (Ω)	Voltage Standing Wave Ratio (Max.)	Frequency (GHz)	Digi-Key Part No.	Price Each			Bourns Part No.
							1	10	50	
<b>Terminators</b>										
1	1206 Series	20W	50	1.25V	DC-4	CHF1206CNT500LW-ND	4.04	3.68	3.17	CHF1206CNT500LW
2	190104 Series, Flanged	800W	50	1.2V	1.0	CHF190104CBF500L-ND	77.99	70.90	60.98	CHF190104CBF500L
3	2010 Series	10W	50	1.2V	2	CHF2010CNP500LX-ND	5.72	5.20	4.48	CHF2010CNP500LX
5	3523 Series	100W	50	1.1V	5	CHF3523DNT500LW-ND	7.81	7.10	6.11	CHF3523DNT500LW
6	3725 Series, SMT	40W	50	1.25V	3	CHF3725CNP500LX-ND	7.40	6.73	5.79	CHF3725CNP500LX
<b>Resistors</b>										
2	190104 Series, Flanged	800W	25	1.2V	1.0	CHF190104CBF250R-ND	77.99	70.90	60.98	CHF190104CBF250R
			100	1.2V	1.0	CHF190104CBF101R-ND	77.99	70.90	60.98	CHF190104CBF101R
4	2010 Series	10W	100	1.2V	2.2	CHF2010CNP101RX-ND	5.72	5.20	4.48	CHF2010CNP101RX

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

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