

Carbon Composition Resistors

Type CRC Series

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The CRC series of resistors is constructed utilising solid carbon composition, which is the traditional medium for absorbing high energy pulses, in cases of high inrush current. These resistors have evolved over many years to have excellent pulse withstand capabilities, whilst remaining very stable. These improved characteristics have been achieved by prudent selection of materials of optimum physical properties and by advances in the manufacturing process.

Key Features

- Designed for Pulse Withstand
- Range of Resistance Tolerances
- Solid Carbon Composition
- Low Cost, High Performance
- Two Sizes Available
- Wide Range of Resistance Values
- Supplied on Tape

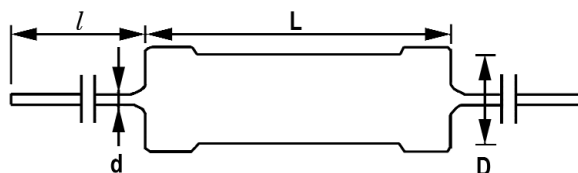
Characteristics - Electrical

	CRC14	CRC12
Power at 70°C Ambient:	0.25 Watts Derating to 0 at +125°C	0.5 Watts Derating to 0 at +125°C
Maximum Voltage:	250 Volts	350 Volts
Resistance Range:	1R0 - 5M6	1R0 - 22M
Resistance Values:	5% E24 Series 10% E12 Series 20% E6 Series	
Voltage Coefficient:	± 0.035%/V	± 0.035%/V
Maximum Overload Voltage:	400 Volts	700 Volts
Insulation Resistance:	1000 M minimum	
Withstand Voltage:	1000 Volts	1500 Volts

Characteristics - Environmental

Operating Temperature Range:	-55°C to +125°C
Temperature Cycles: (-55°C to 85°C, 5 cycles)	ΔR/R ± 2%
Load Life (1000 hours at 70°C):	ΔR/R ± 6%
Resistance to Solder Heat: (360°C for 3 seconds)	ΔR/R ± 3%
Short Time Overload: (2.5 x Rated Power for 5 seconds)	ΔR/R ± 2.5%
Humidity (40°C, 95%RH, 240 hrs):	ΔR/R ± 3%

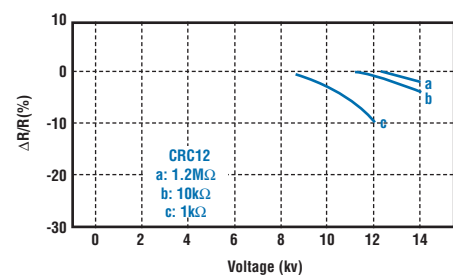
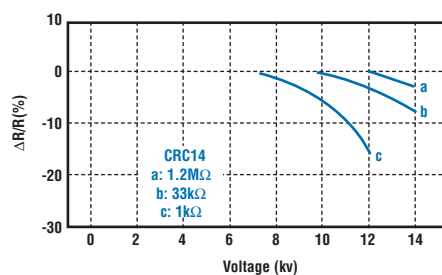
Dimensions-



Style	L	D	I	d
CRC14	6.3 ± 0.7	2.4 ± 0.1	27 min.	0.6
CRC12	9.5 ± 0.8	3.6 ± 0.2	25 min.	0.7

Pulse Withstand Characteristics

Charging and Discharging a 2000 pF Capacitor for 100 Cycles



How to Order

CRC	14	10K	J	TB
Common Part	Size	Resistance Value	Tolerance	Packaging
Carbon Composition Resistor	14 - 0.25W 12 - 0.5W	1 ohm (1 ohm) 1R0 1K ohm (1000 ohms) 1K 100K ohm (100000 ohms) 100K 1M ohm (1000000 ohms) 1M	J - ±5% K - ±10% M - ±20%	TB - Ammo Packed