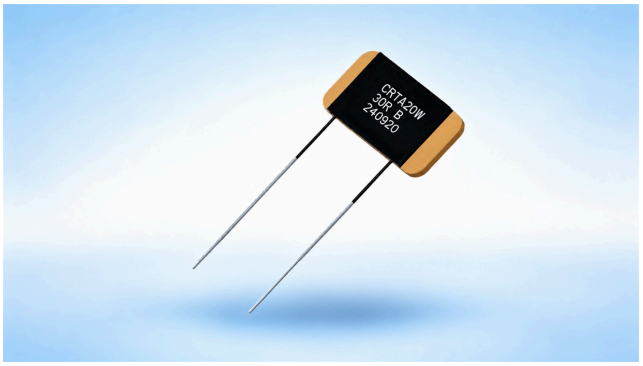
CRTA Series Alloy Resistors

CRTA5W / CRTA10W / CRTA15W / CRTA20W

Product Overview

Low-power plate-type resistors with alloy-foil elements and a non-inductive design. The resistor chip is made from alloy-foil resistance material, providing a low temperature coefficient and excellent pulse withstand capability for current-sensing circuits and other applications.



Technical Features

• Two-terminal connection.

• Packaged with a 96% alumina ceramic plate and a copper heat sink for a larger heat-dissipation area.

• Rated power range: 5W~10W at 70℃

• Resistance range: 10mΩ~50Ω; other resistance values available by agreement.

• Resistance tolerance: down to 0.1%

• Temperature coefficient: down to 5ppm/℃

Applications

• Widely used in the instrument transformer industry

• Motor drive and control circuits

• Medical equipment (X-ray, etc.)

• High-voltage power supplies and new energy applications

Ordering Guide

Model: CRAT10W

Resistance: 5R

Special specifications can be customized by agreement.

Tolerance: 0.25%

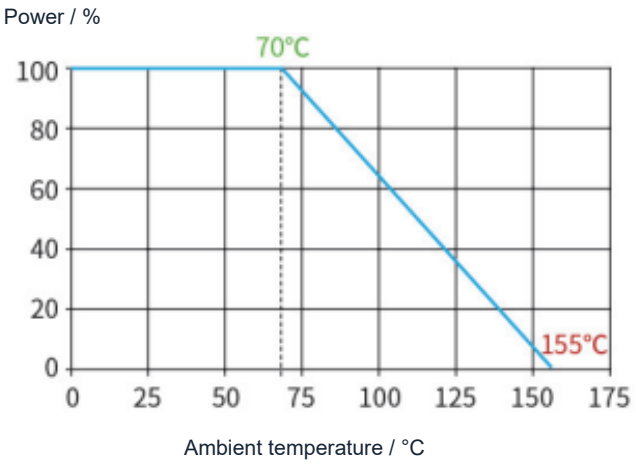
Temperature coefficient: 15PPM

Dimensions

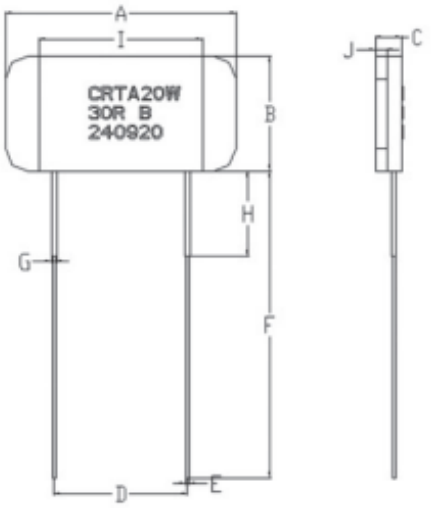
Model	Power (W)/70℃	A ±0.5	B ±0.5	C ±0.5	D ±0.5	E ±0.5	F ±0.5	G ±0.5	H ±0.5	I ±0.5	J ±0.5
CRTA5W	5W	46.0	18.0	5.0	36.0	0.8	80.0	1.4	25.0	42.0	1.0
CRTA10W	10W	60.0	20.0	6.5	36.0	0.8	80.0	1.4	25.0	42.0	2.0
CRTA15W	15W	46.0	30.0	6.5	36.0	0.8	80.0	1.4	25.0	42.0	2.0
CRTA20W	20W	60.0	30.0	6.5	36.0	0.8	80.0	1.4	25.0	42.0	2.0

Dimensions in (mm). Custom dimensions available on request.

Power Derating Curve



Outline Drawing



Main Technical Parameters

Item	Specification
Resistance range	10mΩ ~ 50Ω
Resistance tolerance	±0.1% ~ ±10.0%
Temperature coefficient range	±10ppm/℃~±50ppm/℃ (down to ±5ppm/℃)
Load life	1000 hours at rated power, 70℃; Δ R ≤ ± (0.50%R+0.001Ω)
Moisture resistance	MIL-Std-202, Method 106; ΔR ≤ ± (0.20%R+0.001Ω)
Thermal shock	MIL-Std-202, Method 107, Condition F; ΔR ≤ ± (0.20%R+0.001Ω)
Operating temperature range	-55℃~155℃
Leads	Φ0.8mm oxidation-resistant tinned copper wire or copper-nickel alloy wire