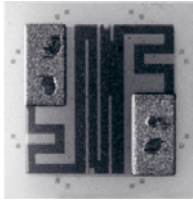


Thin Film 0202 Size Resistor on Alumina



Product may not be to scale

The CC8 series resistor chips offer a combination of low shunt capacitance, small size and excellent stability. The CC8s are manufactured using Vishay Electro-Films (EFI) sophisticated thin film equipment and manufacturing technology. The CC8s are 100 % electrically tested and visually inspected to MIL-STD-883, class H or class K.

FEATURES

- Wire bondable
- Chip size: 0.020 inches square
- Resistance range: 20 Ω to 20 kΩ
- Alumina substrate
- Low stray capacitance: < 0.2 pF
- Resistor material: Nichrome with passivation coat
- Tolerances to 0.5 %

APPLICATIONS

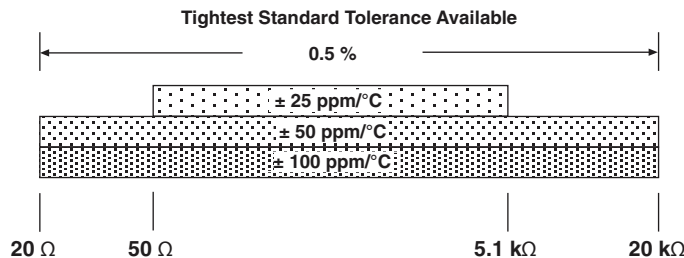
Vishay EFI CC8 chip resistors provide excellent high-frequency response and are ideally suited for prototyping.

Typical application areas are:

- Amplifiers
- Oscillators
- Attenuators
- Couplers
- Filters

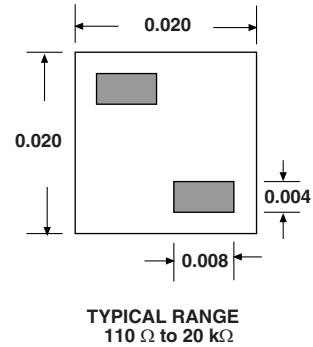
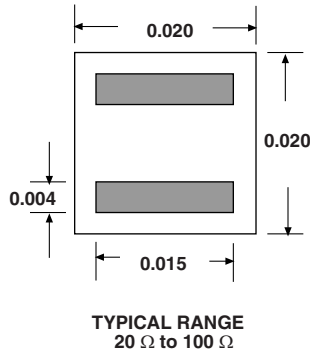
Recommended for hermetic environment where die is not exposed to moisture.

TEMPERATURE COEFFICIENT OF RESISTANCE, VALUES AND TOLERANCES



STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	
Noise, MIL-STD-202, Method 308	- 20 dB typ.
Moisture Resistance, MIL-STD-202 Method 106 (Passivated Film)	± 0.5 % max. ΔR/R
Stability, 1000 h, + 125 °C, 25 mW	± 0.2 % max. ΔR/R
Operating Temperature Range	- 55 °C to + 125 °C
Thermal Shock, MIL-STD-202, Method 107, Test Condition F	± 0.25 % max. ΔR/R
High Temperature Exposure, + 150 °C, 1000 h	± 0.5 % max. ΔR/R
Dielectric Voltage Breakdown	400 V
Insulation Resistance	10 ¹² min.
Operating Voltage	100 V max.
DC Power Rating at + 70 °C (Derated to Zero at + 150 °C)	35 mW max.
5 x Rated Power Short-Time Overload, + 25 °C, 5 s	± 0.25 % max. ΔR/R

DIMENSIONS in inches

SCHEMATIC


MECHANICAL SPECIFICATIONS in inches	
PARAMETER	
Chip Size	0.020 x 0.020 ± 0.003 (0.5 mm x 0.5 mm ± 0.08 mm)
Chip Thickness	0.010 ± 0.002 (0.25 mm ± 0.05 mm)
Chip Substrate Material	99.6 % alumina, 2 - 4 microinch finish
Resistor Material	Nichrome
Bonding Pad Size	0.004 x 0.008 (0.10 mm x 0.20 mm) minimum
Number of Pads	2
Pad Material	25 kΩ minimum gold standard
Passivation	Thermalset plastic
Backing	None

GLOBAL PART NUMBER INFORMATION																	
GLOBAL PART NUMBER: CC8-12500KKSSNHWS																	
GLOBAL PART NUMBER DESCRIPTION: CC8 1.25K 10 % 100 ppm Std SnPb None H WS																	
	C	C	8	-	1	2	5	0	0	K	K	S	S	N	H	W	S
MODEL	RESISTANCE	RESISTANCE MULTIPLIER CODE	TOLERANCE CODE	TCR (ppm/°C)	TRIM STYLE	TERMINATION	BACK METAL	VISUAL CLASS	PACK CODE								
CC8-	First 4 digits are significant figures of resistance	B = 0.01 A = 0.1 0 = 1 1 = 10	B = 0.1 % C = 0.25 % D = 0.5 % F = 1.0 % G = 2.0 % J = 5.0 % K = 10 %	E = ± 25 C = ± 50 K = ± 100	E = Edg S = Std U = Usr N = Nitride	G = Au S = SnPb A = Al T = Lead (Pb)-free (e1)	G = Au N = None	H = Class H K = Class K	WS = Waffle pack 100 min., 1 mult								



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