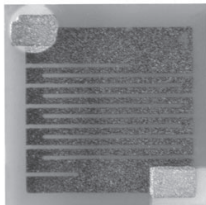


Thin Film 0303 Size Resistor on Alumina



Product may not be to scale

FEATURES

- Chip size: 0.030 inches square
- Resistance range: 25Ω to 38kΩ
- Alumina substrate
- Low stray capacitance: < 0.2pF
- Resistor material: nichrome
- Resistor passivation coat optional
- Tolerances to 0.05%

The CC2 series single-value resistor chips offer a relatively small size, low shunt capacitance and solder pad option. The CC2s nichrome resistor material offers excellent stability.

The CC2s are manufactured using Vishay Electro Films (EFI) sophisticated thin film equipment and manufacturing technology. The CC2s are 100% electrically tested and visually inspected to MIL-STD-883.

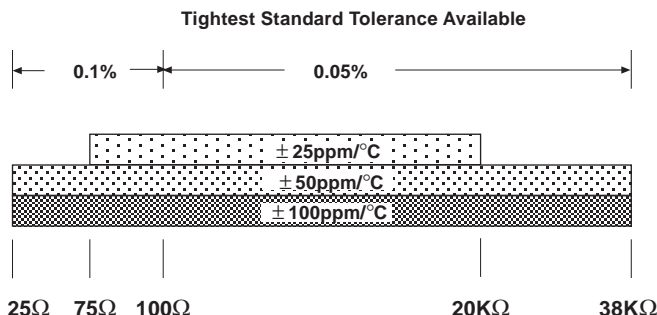
APPLICATIONS

Vishay EFI CC2 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 environments where die is not exposed to moisture.

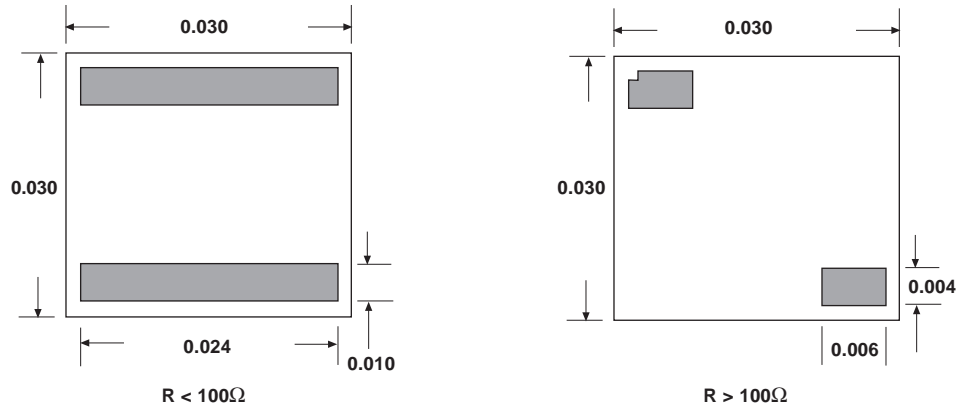
TEMPERATURE COEFFICIENT OF RESISTANCE, VALUES AND TOLERANCES



STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	
Noise, MIL-STD-202, Method 308	- 20dB typical
Moisture resistance, MIL-STD-202 Method 106 - Hermetic applications	± 0.2% maximum ΔR/R
Stability, 1000 hours, + 125°C, 100mW	± 0.1% maximum ΔR/R
Operating temperature range	- 55°C to + 125°C
Thermal shock, MIL-STD-202, Method 107, Test condition F	± 0.25% maximum ΔR/R
High temperature exposure, + 150°C, 100 hours	± 0.1% maximum ΔR/R
Dielectric voltage breakdown	400V
Insulation resistance	10 ¹² minimum
Operating voltage	100V
DC power rating at + 125°C (derated to zero at + 150°C)	100mW maximum
5 x rated power short-time overload, + 25°C, 5 seconds	± 0.25% maximum ΔR/R

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DIMENSIONS in inches

SCHEMATIC

MECHANICAL SPECIFICATIONS in inches

PARAMETER	
Chip size	0.030 x 0.030 ± 0.003 (1.27 x 1.27 ± 0.076mm)
Chip thickness	0.010 ± 0.002 (0.25 ± 0.05mm)
Chip substrate material	99.6% alumina, 2-4 microinch finish
Resistor material	Nichrome
Bonding pad size	0.004 x 0.006 (0.100 x 0.15mm) minimum
Number of pads	2
Pad material	25kÅ minimum gold standard
Backing	None

OPTIONS: Terminations: Aluminum, Nickel solder
 Gold back for solder die attach
 Contact Applications Engineer

ORDERING INFORMATION

Example: 100% visualled, 50Ω, ± 10%, ± 50ppm/°C TCR, Gold Terminations, Resistor coated (thermal set plastic)

W INSPECTION /PACKAGING	CC2 PRODUCT FAMILY	5000 RESISTOR VALUE	B MULTIPLIER CODE	K TOLERANCE CODE	D TCR	GC TERMINATIONS
W = 100% visually inspected parts in matrix tray per MIL-STD-883		Use first 4 significant digits of resistor	B = 0.01 A = 0.1 0 = 1 1 = 10 2 = 100	A = 0.05%* B = 0.1%* C = 0.25%* D = 0.5% F = 1.0% G = 2.0% J = 5.0% K = 10% *Coating standard	A = ± 10ppm/°C B = ± 25ppm/°C D = ± 50ppm/°C E = ± 100ppm/°C	G = Gold GC = Gold Coated
X = Sample, commercial visually inspected parts loaded in matrix trays (4% AQL)						