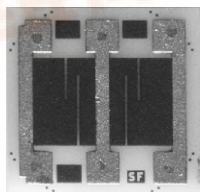


Thin Film, 1010 Center-Tapped Resistors on Alumina



Product may not be to scale

The CCC series resistor chips offer good 400 mW power, low shunt capacitance and a center tap feature.

The CCCs nichrome resistor material offers excellent stability. The CCCs are manufactured using Vishay Electro-Films (EFI) sophisticated thin film equipment and manufacturing technology.

The CCCs are 100 % electrically tested and visually inspected to MIL-STD-883.

APPLICATIONS

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

Typical application areas are:

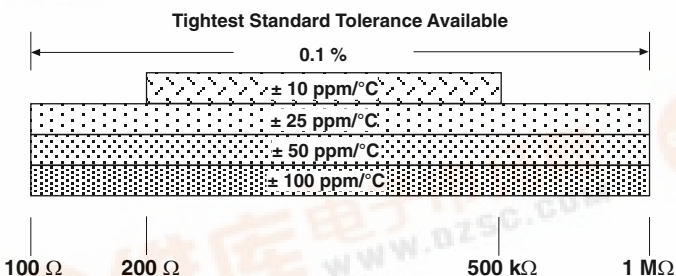
- Amplifiers
- Oscillators
- Attenuators
- Couplers
- Filters

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

FEATURES

- Wire bondable
- Larger single size for extended value range
- Resistance range total: 100 Ω to 1 MΩ
Custom values: R_A or R_B - 50 Ω to 500 kΩ
- Power: 400 mW
- Alumina substrate
- Low stray capacitance: < 0.2 pF
- Resistor material: Nichrome

TEMPERATURE COEFFICIENT OF RESISTANCE, VALUES AND TOLERANCES



PROCESS CODE	
CLASS H*	CLASS K*
203	207
200	204
201	205
202	206

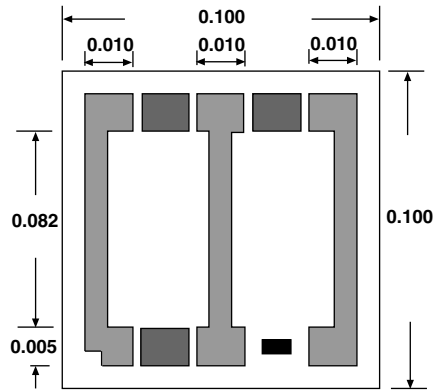
*MIL-PRF-38534 inspection criteria

STANDARD ELECTRICAL SPECIFICATIONS

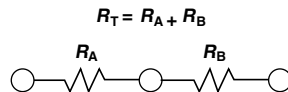
PARAMETER	
Noise, MIL-STD-202, Method 308	- 20 dB typ.
Center Tap Ratio, R_A/R_B : Tolerance	$1 \pm 1\%$
Stability, 1000 h, + 125 °C, 400 mW	$\pm 0.1\%$ max. $\Delta R/R$
Operating Temperature Range	- 55 °C to + 125 °C
Thermal Shock, MIL-STD-202, Method 107, Test Condition F	$\pm 0.25\%$ max. $\Delta R/R$
High Temperature Exposure, + 150 °C, 100 h	$\pm 0.25\%$ max. $\Delta R/R$
Dielectric Voltage Breakdown	400 V
Insulation Resistance	10^{12} min.
Operating Voltage	200 V max.
DC Power Rating at + 125 °C	400 mW max.
5 x Rated Power Short-Time Overload, + 25 °C, 5 s	$\pm 0.25\%$ max. $\Delta R/R$



DIMENSIONS in inches



SCHEMATIC



MECHANICAL SPECIFICATIONS in inches	
PARAMETER	
Chip Size	0.100 x 0.100 ± 0.003 (2.5 x 2.5 ± 0.08 mm)
Chip Thickness	0.010 ± 0.002 (0.25 ± 0.03 mm)
Chip Substrate Material	99.6 % alumina, 2 - 4 microinch finish
Resistor Material	Nichrome
Bonding Pad Size	0.005 x 0.010 (0.12 x 0.24 mm) minimum
Number of Pads	6
Pad Material	25 kÅ minimum gold standard
Backing	None

Options: Gold back for solder die attach
 Contact Applications Engineer

ORDERING INFORMATION					
Example: 100 % visual, $R_T = 500 \Omega$, 50Ω , ± 10 %, ± 50 ppm/°C TCR, $R_A = R_B = R_T/2$, gold pads, class H visual inspection For tighter ratio tolerance, R_A , R_B or user trim consult factory for P/N.					
W	CCC	201	5000	A	K
INSPECTION/ PACKAGING	PRODUCT FAMILY	PROCESS CODE	RESISTANCE VALUE	MULTIPLIER CODE	TOLERANCE CODE
W = 100 % visually inspected parts		See Process Code table	Use first 4 significant digits of resistance (R_T)	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 % H = 2.5 % J = 5.0 % K = 10 %
X = Sample, visually inspected loaded in matrix trays (4 % AQL)					*Coating standard

Disclaimer

All product specifications and data are subject to change without notice.

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