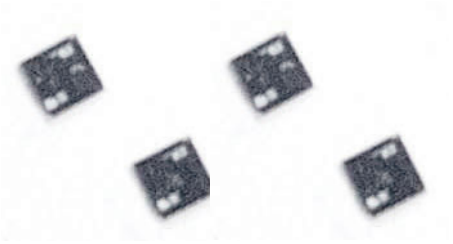
Precision Wirebondable Single Value Chip Resistor



Actual Size

The demand for high precision, high stability microchips for both military and industrial environments is increasing with the growth and sophistication of modern hybrid circuitry.

The RSK 22 series are single value resistor chips. They provide excellent long term stability ± 0.05 % (2000 h, rated power, at + 70 °C) and low noise characteristics < 35 dB.

FEATURES

- Small size 20 mils x 20 mils
- Low temperature coefficient 25 ppm/°C
- Excellent stability 0.05 % (2000 h, rated power at + 70 °C)
- Wirebondable
- Tolerance down to 0.1 %
- Compliant to RoHS Directive 2002/95/EC

Pb-free

RoHS COMPLIANT

GREEN (5-2008)**

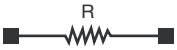
Note

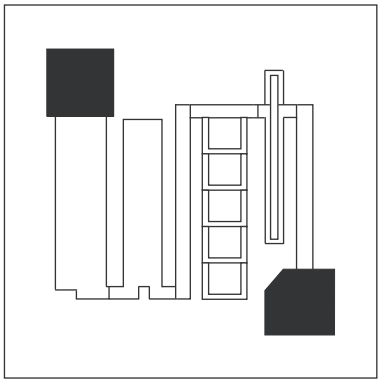
** Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

TYPICAL PERFORMANCE

	ABS
TCR	25 ppm/°C
TOL.	0.1 %

SCHEMATIC AND PATTERN





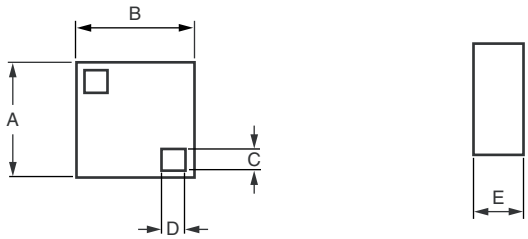
STANDARD ELECTRICAL SPECIFICATIONS

TEST	SPECIFICATIONS	CONDITIONS
Material	Nickel chromium	
Resistance range	10 Ω to 500 kΩ	
Absolute TCR	± 25 ppm/°C	- 55 °C to + 155 °C
Absolute tolerance	± 0.1 %, ± 0.5 %, ± 1 %	
Power rating	100 mW at 25 °C, 50 mW at + 70 °C, 25 mW at + 125 °C	
Stability	± 0.05 % typical, ± 0.1 % maximum	2000 h at + 70 °C under Pn
Voltage coefficient	< 0.1 ppm/V	
Limiting voltage	100 V_{DC}	
Operating temperature range	- 55 °C to + 155 °C (1)	
Storage temperature range	- 55 °C to + 155 °C	(1)
Noise	< - 35 dB typical	MIL-STD-202 method 308
Thermal EMF	0.01 µV/°C	
Shelf life stability	< 50 ppm	

Note

(1) For temperature up to 200 °C, please contact factory

DIMENSIONS



DIMENSION	INCHES	MILLIMETERS
A	0.02	0.55 ± 0.10
B	0.02	0.55 ± 0.10
C	0.004	0.10
D	0.004	0.10
E	0.015	0.40 maximum

MECHANICAL SPECIFICATIONS

Resistive element	Nichrome
Passivation	Silicon nitride
Substrate material	Standard silicon
Bonding pads	Aluminum

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: RSK22N100KD0016 (preferred part number format)

R	S	K	2	2	N	1	0	0	K	D	0	0	1	6

GLOBAL MODEL	VALUE	TOLERANCE	OPTION
	Decimal R, K, or M	**B** = ± 0.1 % **D** = ± 0.5 % **F** = ± 1.0 %	Leave blank if no option

Historical Part Number example: RSK 22N 100K 0.5 % R0016 (will continue to be accepted)

RSK 22N	100K	0.5 %	R0016
HISTORICAL MODEL	VALUE	TOLERANCE	OPTION

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