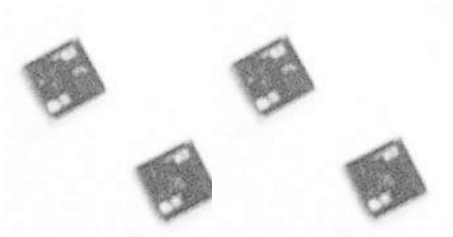
Single Value Chip Resistor



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 mil x 20 mil
- Low temperature coefficient 25 ppm/°C
- Excellent stability 0.05 % (2000 h, rated power at + 70 °C)
- Wirebondable

Pb-free

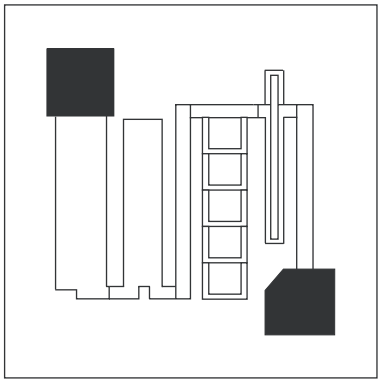
RoHS COMPLIANT

GREEN (5-2008)*

TYPICAL PERFORMANCE

	ABS
TCR	25 ppm/°C
TOL.	0.1 %

SCHEMATIC AND PATTERN



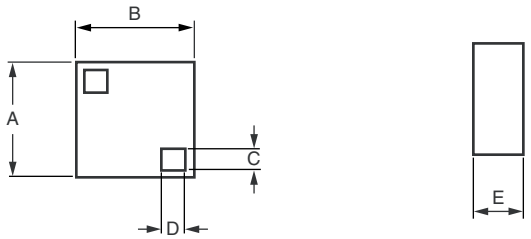
STANDARD ELECTRICAL SPECIFICATIONS		
TEST	**SPECIFICATIONS**	**CONDITIONS**
SERIES	**ULTRAFILM®**	
Resistance range	10 Ω to 500 kΩ	
Absolute TCR	± 25 ppm/°C	- 55 °C to + 155 °C
Absolute tolerance	± 0.1 %, ± 0.5 %, ± 1 %	
Power rating	100 mW at 25 °C, 50 mW at + 70 °C, 25 mW at + 125 °C	
Stability	± 0.05 % typical, ± 0.1 % maximum	2000 h at + 70 °C under Pn
Voltage coefficient	< 0.1 ppm/V	
Working 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.

* Please see document “Vishay Green and Halogen-Free Definitions (5-2008)” http://www.vishay.com/doc?99902

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
Body	Silicon

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

Disclaimer

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

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