Precision Wirebondable Single Value Thin Film Chip Resistor

Actual Size

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 %
- High temperature (230 °C), see RMKHT datasheet (www.vishay.com/doc?60075)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

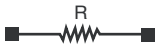
HALOGEN FREE GREEN (5-2008)

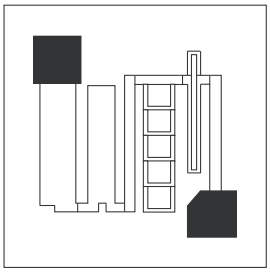
LINKS TO ADDITIONAL RESOURCES

3D Models

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.

SCHEMATIC AND PATTERN





STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	RESISTANCE RANGE Ω	RATED POWER $P_{70\,°C}$ W	LIMITING ELEMENT VOLTAGE V	TOLERANCE ± %	TEMPERATURE COEFFICIENT ± ppm/°C
RSK 22N	0202	10 to 500K	0.05	100	0.1, 0.5, 1	25

CLIMATIC SPECIFICATIONS

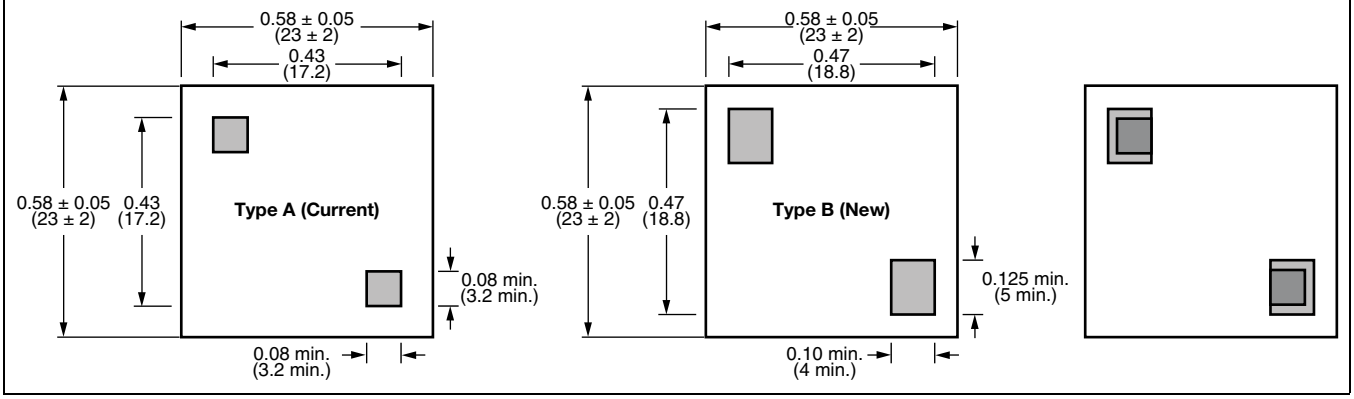
Operating temperature range (1)	-55 °C to +155 °C
Storage temperature range	-55 °C to +155 °C

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

MECHANICAL SPECIFICATIONS

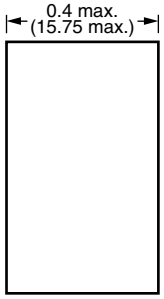
Resistive element	Nichrome
Passivation	Silicon nitride
Substrate material	Silicon
Bonding pads	Aluminum

DIMENSIONS in millimeters (mils)



Note
- Customer can get one or the other part, but positions of pads are similar

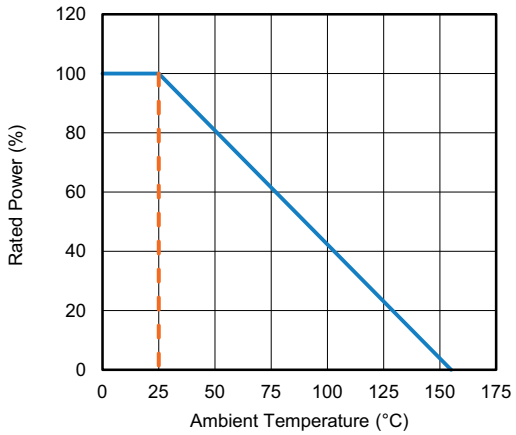
DIMENSIONS in millimeters (mils)



TECHNICAL SPECIFICATIONS

TEST	SPECIFICATIONS	CONDITIONS
Stability	± 0.05 % typical, ± 0.1 % maximum	2000 h at +70 °C under Pn
Voltage coefficient	< 0.1 ppm/V	
Noise	< -35 dB typical	MIL-STD-202 method 308
Thermal EMF	0.01 µV/°C	
Shelf life stability	< 50 ppm	

DERATING



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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