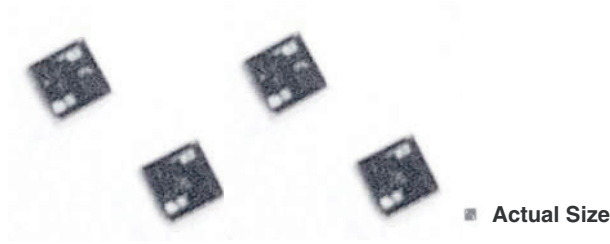


Wirebondable High Precision Single Value Chip Resistors



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 RMK 22 series are single value resistor chips. They provide excellent long term stability 0.03 % (2000 h, rated power, at + 70 °C) and low noise characteristics < 35 dB.

FEATURES

- Small size 20 mils x 20 mils
- Excellent temperature coefficient < 10 ppm/°C
- Excellent stability 0.03 % after 2000 h at Pn at 70 °C
- Wirebondable
- Tolerance down to 0.01 %
- Compliant to RoHS Directive 2002/95/EC



RoHS
COMPLIANT
GREEN
(5-2008)**

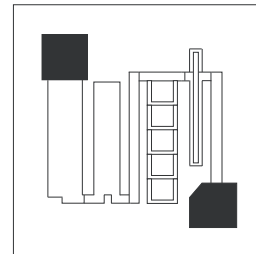
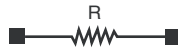
Note

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

TYPICAL PERFORMANCE

	ABS
TCR	5 ppm/°C
TOL.	0.1 %

SCHEMATIC AND PATTERN



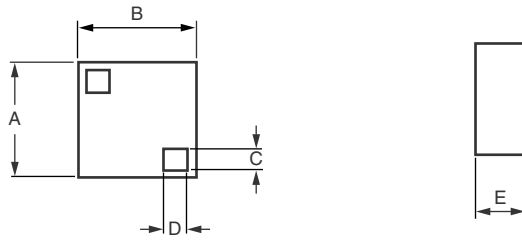
STANDARD ELECTRICAL SPECIFICATIONS		
TEST	SPECIFICATIONS	CONDITIONS
MATERIAL	ULTRAFILM	
Resistance range	R = 50 Ω to 300 kΩ	
TCR	± 5 ppm/°C typical, ± 10 ppm/°C maximum	- 55 °C to + 155 °C maximum
Absolute tolerance	± 0.01 % to ± 1.0 %	
Power rating	50 mW	at + 70 °C
Stability	± 0.03 % typical, ± 0.05 % 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	
Noise	< - 35 dB typical	MIL-STD-202 method 308
Thermal EMF	< 0.01 μV/°C	
Shelf life stability	50 ppm	1 year at + 25 °C

Note

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



DIMENSIONS



DIMENSION	INCHES		MILLIMETERS	
	MIN.	MAX.	MIN.	MAX.
A	0.018	0.026	0.45	0.65
B	0.018	0.026	0.45	0.65
C	0.004		0.10	
D	0.004		0.10	
E			0.158	0.40

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

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: **RMK22N100KD0016** (preferred part number format)

R	M	K	2	2	N	1	0	0	K	D	0	0	1	6
GLOBAL MODEL			VALUE			TOLERANCE			OPTION					
			Decimal R, K or M			L = ± 0.01 % P = ± 0.02 % W = ± 0.05 % B = ± 0.1 % D = ± 0.5 % F = ± 1.0 %			Leave blank if no option					

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

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



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