

Single Value Chip Resistors

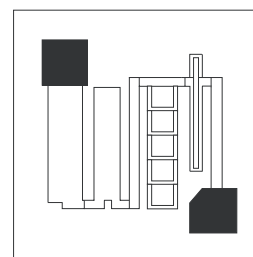
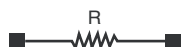


■ Actual Size

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 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.

SCHEMATIC AND PATTERN



FEATURES

- Small size 20 mil x 20 mil
- Excellent temperature coefficient < 10 ppm/°C
- Excellent stability 0.03 %
- Wirebondable



RoHS
COMPLIANT
GREEN
[5-2008]*

TYPICAL PERFORMANCE

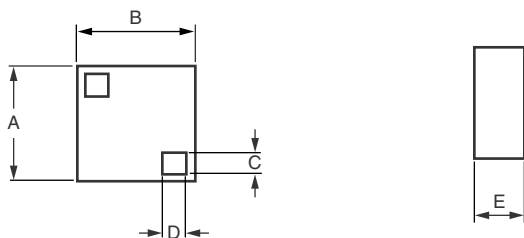
	ABS
TCR	5 ppm/°C
TOL.	0.1 %

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	± 0.1 %, ± 0.5 %, ± 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	
Working 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.

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

**DIMENSIONS**

DIMENSION	INCHES		MILLIMETERS	
	MIN.	MAX.	MIN.	MAX.
A	0.021	0.022	0.54	0.56
B	0.021	0.022	0.54	0.56
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				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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