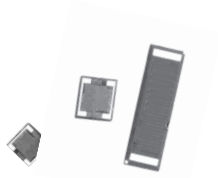


Single Value Chip Resistors

RMK Series (55N and 515N)



Actual Size

The demand for high precision, high stability resistive chips for incorporating in hybrid micro-circuits has increased and is catered for by the comprehensive range of VISHAY micro and minichips.

The super stable RMK nickel chromium resistive film has transformed the performances and characteristics of micro resistive chips bringing a "new state-of-the-art" to the technology.

A variety of substrates are available in silicon, alumina, glass, or sapphire, to ensure the best possible characteristics compatible with your application needs.

Precision wafer laser trimming is employed to trim each resistor to precise tolerance.

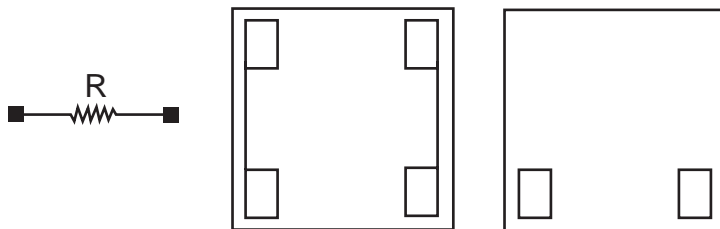
FEATURES

- Precise tolerance from $\pm 0.01\%$ to $\pm 1\%$
- Wide resistance ranges from 1K ohm to 2M ohms
- Low temperature coefficient ± 10 ppm/ $^{\circ}\text{C}$ Max.
- Excellent stability < 500 ppm (2000 hrs. at $+70^{\circ}\text{C}$)

TYPICAL PERFORMANCE

	ABS
TCR	5
TOL	0.05%

Schematic and Pattern



HYBRID

Test	Specifications	Conditions
Material	ULTRAFILM®	
Resistance Range	1K ohm to 2M ohms	
Absolute TCR:	± 5 ppm/ $^{\circ}\text{C}$	-55°C to $+125^{\circ}\text{C}$
Absolute Tolerance:	$\pm 0.1\%$	
Stability (ΔR Ratio)	$\pm 0.03\%$	2000 hrs. Pn @ $+70^{\circ}\text{C}$
Voltage Coefficient	< 0.1 ppm/Volt	
Working Voltage	100 Volts	
Operating Temperature Range	-55°C to $+155^{\circ}\text{C}$	
Storage Temperature Range	-55°C to $+155^{\circ}\text{C}$	
Noise	< -35 dB Typical	
Thermal EMF	< 0.01 $\mu\text{V}/^{\circ}\text{C}$	
Shelf Life Stability	50 ppm	1 Year @ $+25^{\circ}\text{C}$

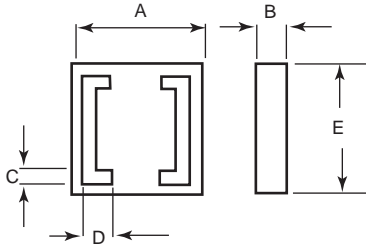
Single Value Chip Resistors

RMK Series (55N and 515N)



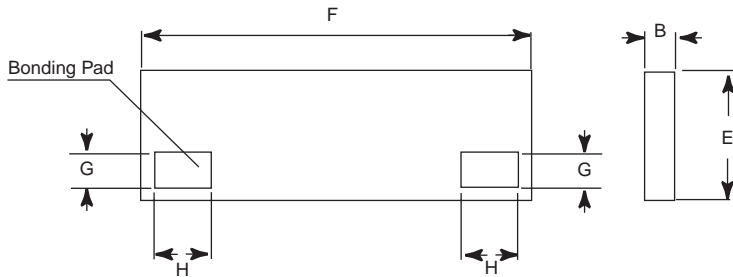
Dimensions

RMK 55N



Dimension	Inches	Millimeters
A	0.050	1.27
B	0.015 Max.	0.4 Max.
C	0.005	0.12
D	0.010	0.27
E	0.050	1.27
F	0.150	3.81
G	0.015	0.40
H	0.023	0.60

RMK515N



Mechanical Specifications

Resistive Element Nichrome
 Passivation Silicon Nitride

Substrate Material Silicon
 Bonding Pad Alumina

How to Order

Series	Size	Film	Ohmic Value	Tolerance
RMK	55	N	220K	±0.1%
		N = NiCr		±0.1%
				±0.5%
				±1.0%
				±0.01%
				±0.05%
				±0.01%

HYBRID