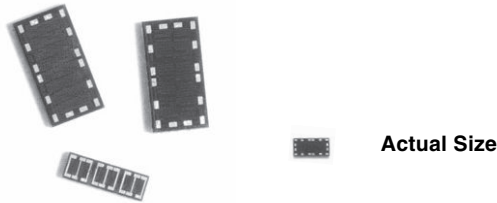


Wirebondable Thin Film Chip Resistor Networks



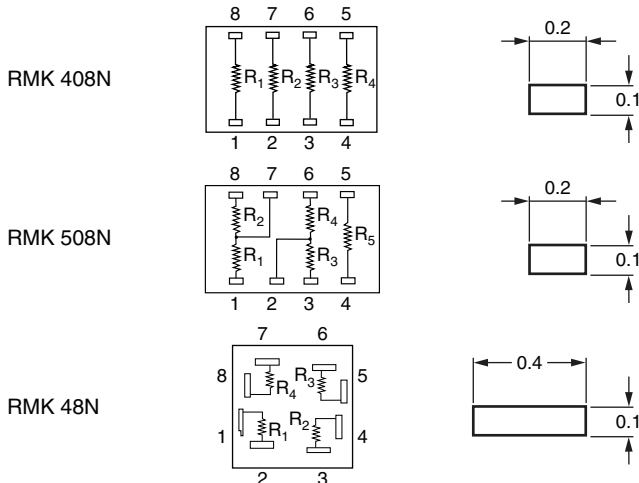
DESIGN SUPPORT TOOLS

[click logo to get started](#)

3D
Models
Available

Manufactured in ULTRAFILM technology, these resistor network chips have a high level of integration, wide ohmic value range, very low temperature coefficient 10 ppm/°C which are unequaled on the market today. Laser trimming can provide excellent precision down to 0.1 % abs 0.01 % ratio.

SCHEMATIC



FEATURES

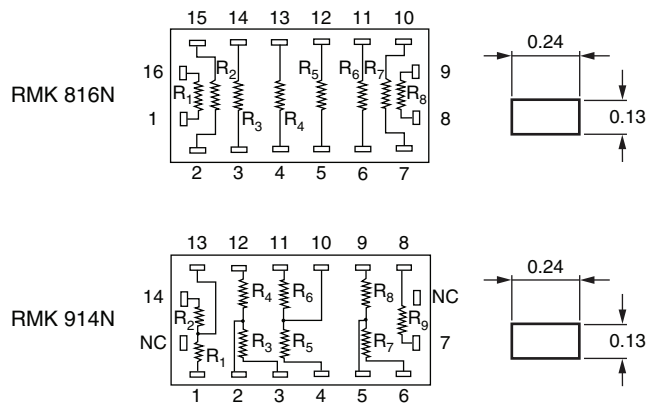
- High precision tolerances down to 0.01 % ratio
- Very low temperature coefficient: 10 ppm/°C abs., 2 ppm/°C ratio
- Aluminum or gold pads
- Excellent stability < 300 ppm, 2000 h at Pn at +70 °C
- Wirebondable
- Gold pads on request
- For high temperature version refer to RMKHT (www.vishay.com/doc?60075)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

TYPICAL PERFORMANCE

	ABS	TRACKING
TCR	5 ppm/°C	1 ppm/°C
	ABS	RATIO
TOL.	0.1 %	0.01 %



STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	RESISTANCE RANGE Ω	POWER RATING PER PACKAGE $P_{70^{\circ}\text{C}}$ W	POWER RATING PER PACKAGE $P_{125^{\circ}\text{C}}$ W	ABSOLUTE TOLERANCE ± %	RATIO TOLERANCE ± %	ABSOLUTE TCR ⁽¹⁾ ± ppm/°C	RATIO TCR ⁽²⁾ ± ppm/°C
RMK 48N	0808	1K to 200K	0.125	0.050	0.1, 0.25, 0.5, 1	0.01, 0.02, 0.05, 0.1	10, 5	1; 2
RMK 408N	0610	1K to 200K	0.250	0.125	0.1, 0.25, 0.5, 1	0.01, 0.02, 0.05, 0.1	10, 5	1; 2
RMK 508N	0610	1K to 200K	0.250	0.125	0.1, 0.25, 0.5, 1	0.01, 0.02, 0.05, 0.1	10, 5	1; 2
RMK 816N	0714	1K to 200K	0.250	0.125	0.1, 0.25, 0.5, 1	0.01, 0.02, 0.05, 0.1	10, 5	1; 2
RMK 914N	0714	1K to 200K	0.250	0.125	0.1, 0.25, 0.5, 1	0.01, 0.02, 0.05, 0.1	10, 5	1; 2

Notes

- ⁽¹⁾ ± 10 ppm/°C maximum at -55 °C to +155 °C; ± 5 ppm/°C maximum at 0 °C to +70 °C
⁽²⁾ ± 1 ppm/°C typical, ± 2 ppm/°C maximum at -55 °C to +155 °C

PERFORMANCES

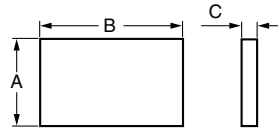
TEST	SPECIFICATIONS	CONDITION
Stability	< 300 ppm	2000 h at +70 °C under Pn
Voltage coefficient	< 0.1 ppm/V	
Limiting voltage	100 V per resistor	
Operating temperature range	-55 °C to +155 °C ⁽¹⁾	
Storage temperature range	-55 °C to +155 °C	
Noise	< -35 dB	
Thermal EMF	0.01 μV/°C	
Shelf life stability	50 ppm	1 year at +25 °C

Note

- ⁽¹⁾ For 200 °C operations please consult factory

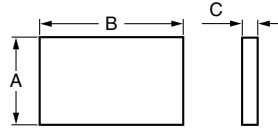


RMK 408N



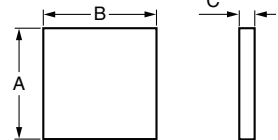
DIMENSIONS in millimeters	
A	1.6 ± 0.1
B	2.6 ± 0.1
C	0.4 maximum

RMK 508N



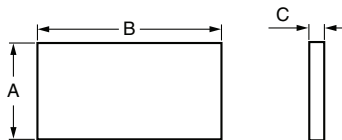
DIMENSIONS in millimeters	
A	1.6 ± 0.1
B	2.6 ± 0.1
C	0.4 maximum

RMK 48N



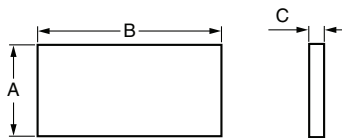
DIMENSIONS in millimeters	
A	2.1 ± 0.1
B	2.1 ± 0.1
C	0.4 maximum

RMK 816N



DIMENSIONS in millimeters	
A	1.8 ± 0.1
B	3.5 ± 0.1
C	0.4 maximum

RMK 914N



DIMENSIONS in millimeters	
A	1.8 ± 0.1
B	3.5 ± 0.1
C	0.4 maximum

MECHANICAL SPECIFICATIONS	
Resistive element	Nichrome
Substrate material	Alumina (silicon on some cases)
Bonding pads	Aluminum or gold
Passivation	Silicon nitride

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: **RMK408N10KBW 0099**

R	M	K	4	0	8	N	1	0	K	B	W		0	0	9	9
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GLOBAL MODEL	VALUE	ABS. TOLERANCE	RATIO TOLERANCE	TERMINATIONS	OPTION
RMK408N RMK508N RMK816N RMK714N RMK914N RMK48N	Decimal R or K	B = ± 0.1 % C = ± 0.25 % D = ± 0.5 % F = ± 1 %	B = ± 0.1 % W = ± 0.05 % P = ± 0.02 % L = ± 0.01 %	Blank = aluminum G = gold	Leave blank if no option

For custom specification:

CN	1077
GLOBAL MODEL	REFERENCE

Reference is provided by Vishay Sfernice



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