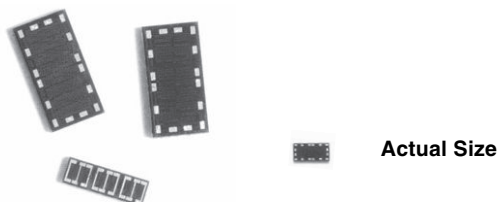


## Wirebondable Thin Film Chip Resistor Networks



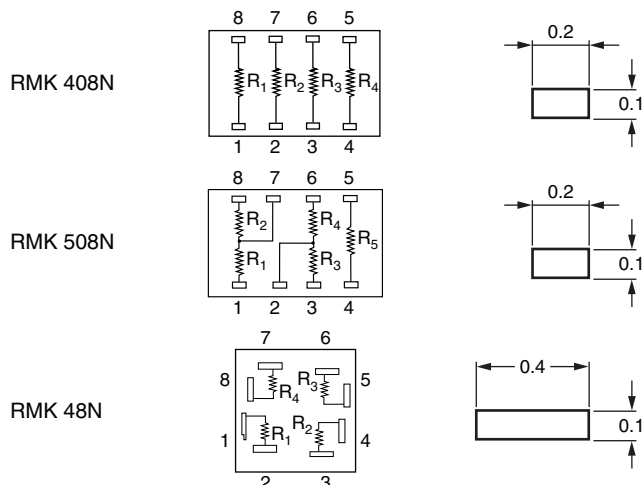
### DESIGN SUPPORT TOOLS

[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

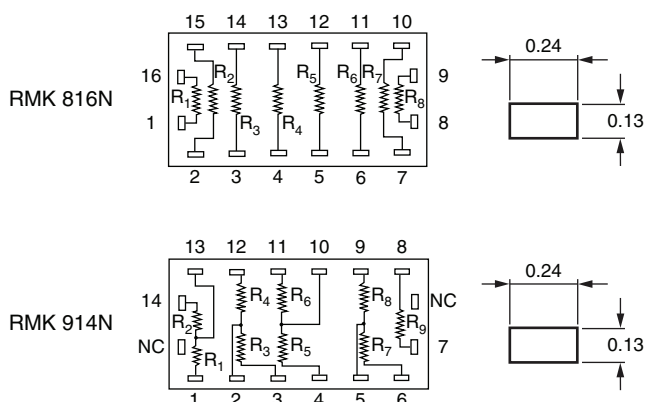
- High precision tolerances down to 0.01 % ratio
- Very low temperature coefficient: 10 ppm/°C abs., 2 ppm/°C ratio
- Aluminum or gold pads
- Excellent stability < 300 ppm, 2000 h at Pn at +70 °C
- Wirebondable
- Gold pads on request
- For high temperature version refer to RMKHT ([www.vishay.com/doc?60075](http://www.vishay.com/doc?60075))
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://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 <sub>70 °C</sub> W	POWER RATING PER PACKAGE P <sub>125 °C</sub> W	ABSOLUTE TOLERANCE ± %	RATIO TOLERANCE ± %	ABSOLUTE TCR <sup>(1)</sup> ± ppm/°C	RATIO TCR <sup>(2)</sup> ± 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

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

### PERFORMANCES

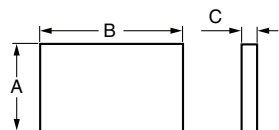
TEST	SPECIFICATIONS	CONDITION
Stability	< 300 ppm	2000 h at +70 °C under Pn
Voltage coefficient	< 0.1 ppm/V	
Limiting voltage	100 V per resistor	
Operating temperature range	-55 °C to +155 °C <sup>(1)</sup>	
Storage temperature range	-55 °C to +155 °C	
Noise	< -35 dB	
Thermal EMF	0.01 μV/°C	
Shelf life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

#### Note

- <sup>(1)</sup> For 200 °C operations please consult factory

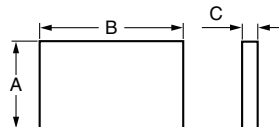


RMK 408N

**DIMENSIONS** in millimeters

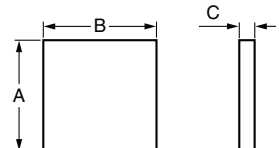
A	$1.6 \pm 0.1$
B	$2.6 \pm 0.1$
C	0.4 maximum

RMK 508N

**DIMENSIONS** in millimeters

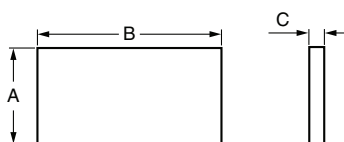
A	$1.6 \pm 0.1$
B	$2.6 \pm 0.1$
C	0.4 maximum

RMK 48N

**DIMENSIONS** in millimeters

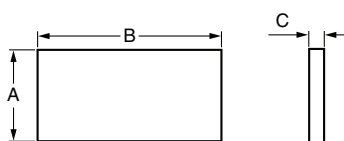
A	$2.1 \pm 0.1$
B	$2.1 \pm 0.1$
C	0.4 maximum

RMK 816N

**DIMENSIONS** in millimeters

A	$1.8 \pm 0.1$
B	$3.5 \pm 0.1$
C	0.4 maximum

RMK 914N

**DIMENSIONS** in millimeters

A	$1.8 \pm 0.1$
B	$3.5 \pm 0.1$
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: RMK408N10KBW0099

R	M	K	4	0	8	N	1	0	K	B	W		0	0	9	9
---	---	---	---	---	---	---	---	---	---	---	---	--	---	---	---	---

## GLOBAL MODEL

RMK408N  
RMK508N  
RMK816N  
RMK714N  
RMK914N  
RMK48N

## VALUE

Decimal  
R or KABS.  
TOLERANCE

B =  $\pm 0.1\%$   
C =  $\pm 0.25\%$   
D =  $\pm 0.5\%$   
F =  $\pm 1\%$

RATIO  
TOLERANCE

B =  $\pm 0.1\%$   
W =  $\pm 0.05\%$   
P =  $\pm 0.02\%$   
L =  $\pm 0.01\%$

## TERMINATIONS

Blank = aluminum  
G = gold

## OPTION

Leave blank  
if no option

For custom specification:

CN

1077

GLOBAL MODEL

REFERENCE

Reference is provided by Vishay Sfernice



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