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Vishay Sfernice

RoHS

COMPLIANT

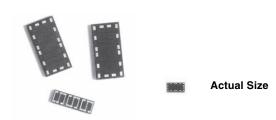
**HALOGEN** 

FREE

**GREEN** 

(5-2008)

# Wirebondable Thin Film Chip Resistor Networks



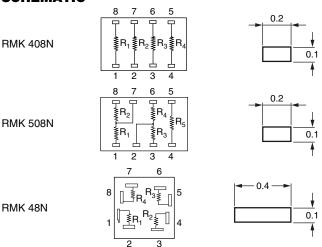
## **DESIGN SUPPORT TOOLS**

click logo to get started



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</li> +70 °C

Wirebondable

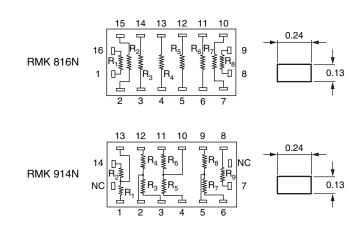
Gold pads on request

 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

### TYPICAL PERFORMANCE

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



STANDA	STANDARD ELECTRICAL SPECIFICATIONS							
MODEL	SIZE	$\begin{array}{c} \textbf{RESISTANCE} \\ \textbf{RANGE} \\ \Omega \end{array}$	POWERRATING 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	8080	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

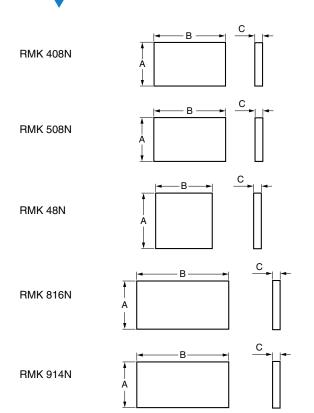
 $\stackrel{(1)}{\pm}$  ± 10 ppm/°C maximum at -55 °C to +155 °C; ± 5 ppm/°C maximum at 0 °C to +70 °C  $\stackrel{(2)}{\pm}$  ± 1 ppm/°C typical, ± 2 ppm/°C maximum at -55 °C to +155 °C

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
(1) For 200 °C operations please consult factory

# RMK 408N, 508N, 48N, 816N, 914N (CN)

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DIMENSIONS in millimeters		
A	1.6 ± 0.1	
В	2.6 ± 0.1	
С	0.4 maximum	

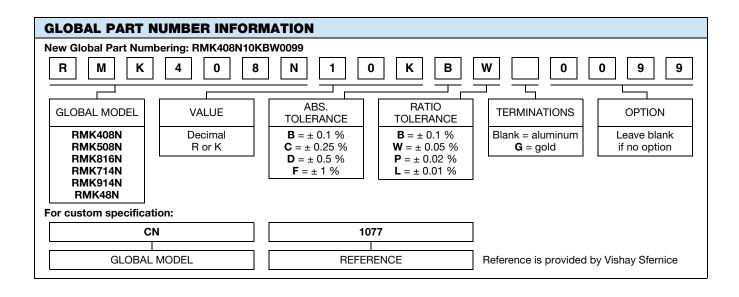
DIMENSIONS in millimeters		
Α	1.6 ± 0.1	
В	2.6 ± 0.1	
С	0.4 maximum	

<b>DIMENSIONS</b> in millimeters		
Α	2.1 ± 0.1	
В	2.1 ± 0.1	
С	0.4 maximum	

<b>DIMENSIONS</b> in millimeters		
Α	1.8 ± 0.1	
В	3.5 ± 0.1	
С	0.4 maximum	

DIMENSIONS in millimeters		
Α	1.8 ± 0.1	
В	3.5 ± 0.1	
С	0.4 maximum	

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





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