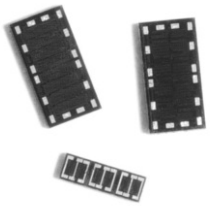
Bare Chip Resistor Network



Actual Size

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.

FEATURES

- High precision tolerances down to 0.01 % Ratio
- Very low temperature coefficient: 10 ppm/°C abs., 2 ppm/°C ratio
- Excellent stability < 300 ppm, 2000 h at Pn at + 70 °C
- Wirebondable

Pb-free

RoHS COMPLIANT

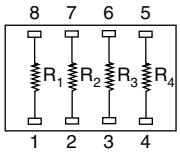
GREEN (5-2008)*

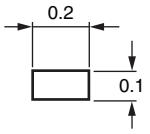
TYPICAL PERFORMANCE

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

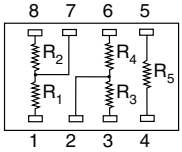
SCHEMATIC

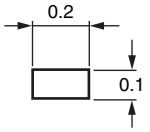
RMK 408N



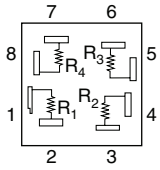


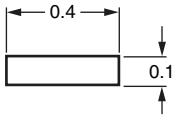
RMK 508N



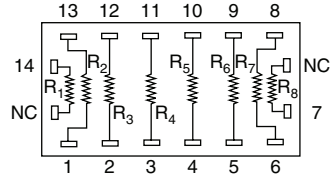


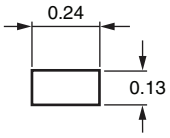
RMK 48N



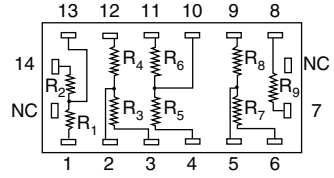


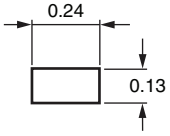
RMK 816N





RMK 914N





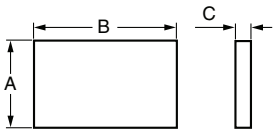
STANDARD ELECTRICAL SPECIFICATIONS			
TEST		**SPECIFICATIONS**	**CONDITION**
SERIES		**48N, 408N, 508N, 816N, 914N**	
TCR:	**Tracking**	± 1 ppm/°C typical/± 2 ppm/°C maximum	- 55 °C to + 125 °C
	Absolute	± 10 ppm/°C maximum/± 5 ppm/°C maximum	- 55 °C to + 125 °C/0 °C to + 70 °C
Tolerance:	**Ratio**	± 0.05 %, ± 0.02 %, ± 0.01 %	
	Absolute	± 1.0 %, ± 0.5 %, ± 0.25 %, ± 0.1 %	
Power rating: (0 W at + 155 °C)		48N = 125 mW, others: 250 mW	at + 70 °C
		48N = 50 mW, others: 125 mW	at + 125 °C
Stability		< 300 ppm	2000 h at + 70 °C under Pn
Voltage coefficient		< 0.1 ppm/V	
Working voltage		100 V	
Operating temperature range		- 55 °C to + 155 °C (1)	
Storage temperature range		+ 70 °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

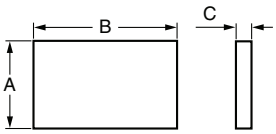
* Please see document "Vishay Green and Halogen-Free Definitions (5-2008)" http://www.vishay.com/doc?99902

RMK 408N



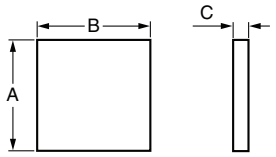
DIMENSIONS in millimeters	
A	1.6 ± 0.1
B	2.6 ± 0.1
C	0.4 maximum

RMK 508N



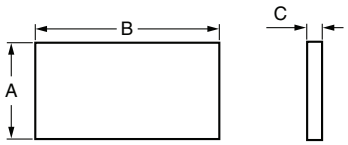
DIMENSIONS in millimeters	
A	1.6 ± 0.1
B	2.6 ± 0.1
C	0.4 maximum

RMK 48N



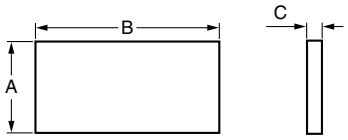
DIMENSIONS in millimeters	
A	2.1 ± 0.1
B	2.1 ± 0.1
C	0.4 maximum

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	Silicon
Bonding pads	Alumina
Passivation	Silicon Nitride

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: RMK408N10KBW (preferred part number format)

R	M	K	4	0	8	N	1	0	K	B	W	0	0	0	2

GLOBAL MODEL	VALUE	ABS. TOLERANCE	RATIO TOLERANCE	OPTION
RMK408N RMK508N RMK816N RMK714N RMK914N RMK48N	Decimal: **R** or **K**	**B** = 0.1 % **C** = 0.25 % **D** = 0.5 %	**W** = 0.05 % **P** = 0.02 % **L** = 0.01 %	leave blank if no option

For custom specification:

CN	**1077**
GLOBAL MODEL	REFERENCE

Historical Part Number example: RMK 408 N 10K 0.1 % abs 0.05 % ratio R0002 (will continue to be accepted)

RMK 408 N	**10K**	**0.1 % abs 0.05 % ratio**	**R0002**
HISTORICAL MODEL	VALUE	ABS. AND RATIO TOLERANCE	OPTION

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All product specifications and data are subject to change without notice.

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