



# RMK — 408 N — 508 N — 48 N — 816 N — 914 N

## standard resistor network chips

— thin film technology **ULTRAFILM®**

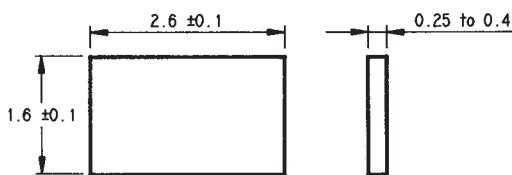


Manufactured in ULTRAFILM® technology, these resistor network chips have a high level of integration, wide ohmic value range, very low temperature coefficient which are unequalled on the market today.

Laser trimming can provide excellent precision.

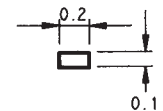
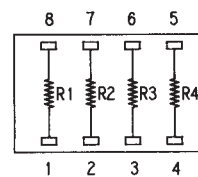
- **HIGH PRECISION TOLERANCES** from  $\pm 0,05\%$  to  $\pm 0,1\%$
- **TOLERANCE RATIO** up to  $0,01\%$
- **VERY LOW TEMPERATURE COEFFICIENT**  $\pm 10$  ppm/°C max.
- **T.C.R. TRACKING**  $\pm 1$  ppm typical
- **EXCELLENT STABILITY**  $< 300$  ppm after 2000 hrs Pn at  $+70^\circ\text{C}$

### DIMENSIONS

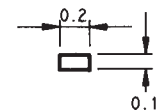
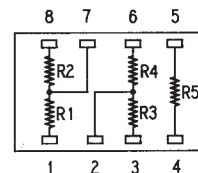
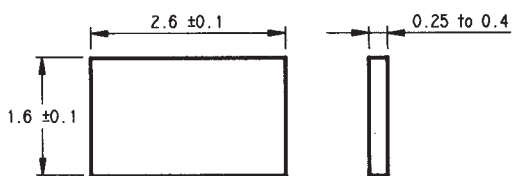


### RMK 408N

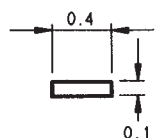
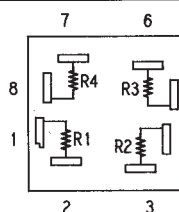
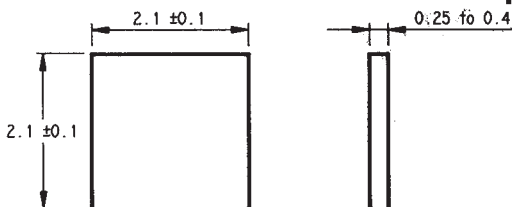
### ELECTRICAL DIAGRAM



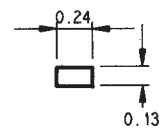
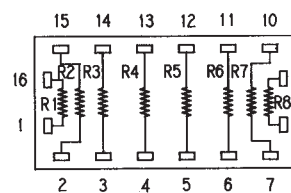
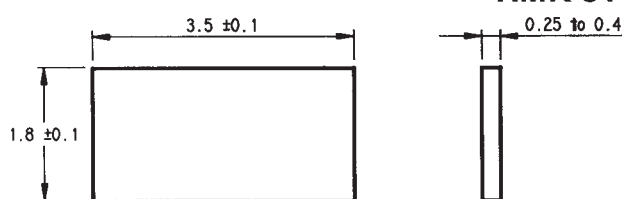
### RMK 508N



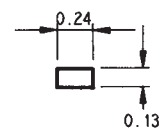
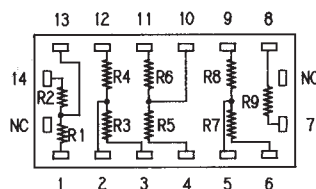
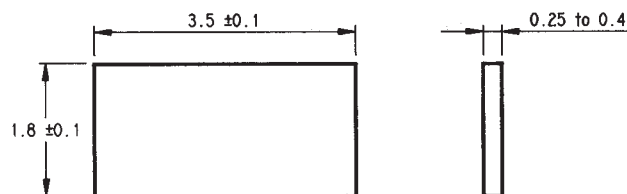
### RMK 48N



### RMK 816N



### RMK 914N



Dimensions in mm.

### LAYOUT

Technical specifications showing layout of the resistor and interconnection pads are available on request.

## SPECIFICATIONS

### MECHANICAL

FILM... nickel chromium  
 PASSIVATION... Si<sub>3</sub>N<sub>4</sub>  
 TERMINATIONS... aluminium

### ENVIRONMENTAL

TEMPERATURE RANGE... -55°C to +155°C  
 For 200°C operations,  
 please consult SFERNICE

## ELECTRICAL

Table 1

SERIES		RMK 408N	RMK 508N	RMK 48N	RMK 816N	RMK 914N
POWER RATING PER CHIP (0 W at + 155°C)	at +70°C	250 mW	250 mW	125 mW	250 mW	250 mW
	at +125°C	125 mW	125 mW	50 mW	125 mW	125 mW
OHMIC VALUE R <sub>1</sub> to R <sub>n</sub>		1 kΩ - 2 kΩ - 5 kΩ - 10 kΩ - 20 kΩ - 50 kΩ - 100 kΩ - 200 kΩ other values on request				
TOLERANCE	ABSOLUTE	±0,1% - ±0,05%				
	RATIO	0,05% - 0,02% - 0,01%				
TEMPERATURE COEFFICIENT OF RESISTANCE	NOMINAL	±10 ppm/°C max.				
	from -55°C to +125°C	± 5 ppm/°C max.				
	from 0°C to + 70°C	1 ppm/°C typical 2 ppm/°C max.				
TRACKING -55°C + 125°C		1 ppm/°C typical 2 ppm/°C max.				
LIMITING ELEMENT VOLTAGE		100 V				
LOAD STABILITY		P <sub>n</sub> at +70°C/2000 hours ±0,03% typical ±0,05% max.				

## TOLERANCE AND TOLERANCE RATIO

Table 2

Absolute tolerance	Tolerance ratio
±0,1%	0,05%
±0,05%	0,02% standard or 0,01% on request

## ORDERING PROCEDURE

SERIES	VERSION	FILM	VALUE R <sub>1</sub> to R <sub>n</sub>	ABSOLUTE TOLERANCE	TOLERANCE RATIO
<b>RMK</b>	<b>48</b>	<b>N</b>	<b>2 kΩ</b>	<b>±0,1%</b>	<b>0,05%</b>
	408 508 48 816 914		1 kΩ - 2 kΩ 5 kΩ - 10 kΩ 20 kΩ - 50 kΩ 100 kΩ - 200 kΩ	±0,1% ±0,05%	0,05% 0,02% 0,01%



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