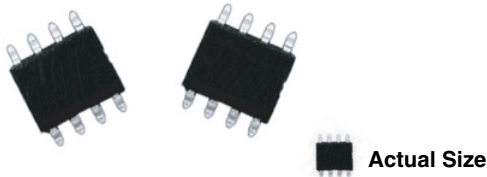


## SMD Molded, 50 Mil Pitch, Dual-In-Line Thin Film Resistor Networks



### FEATURES

- Tight TCR tracking down to 5 ppm/°C
- Monolithic reliability
- Low noise < -35 dB
- SMD precision networks
- SO08, SO14, SO16 cases
- MSL 1 to JEDEC J-STD-020C specification



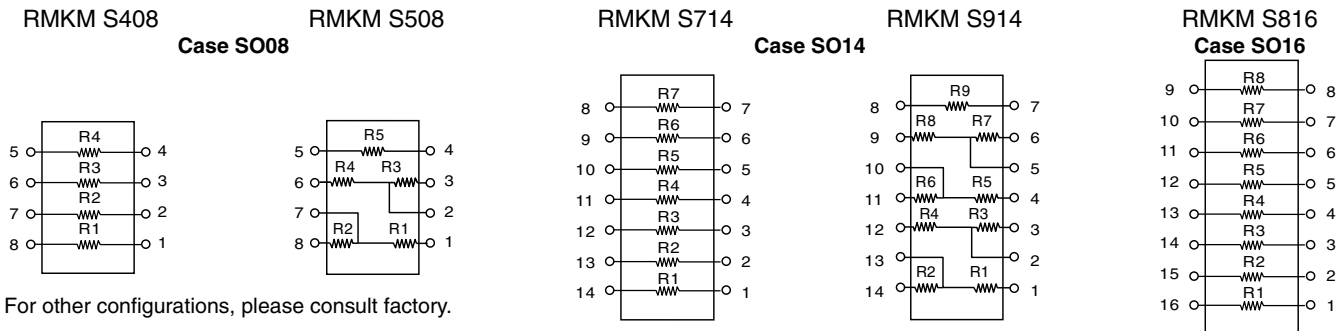
### DESIGN SUPPORT TOOLS AVAILABLE



The RMKM series of small outline surface mount style molded package can accommodate resistor network to your particular application requirements in compact circuit integration. The resistor element is a special nickel chromium film formulation on oxidized silicon.

Utilizing those networks will enable you to take advantage of parametric performances which will introduce in your circuitry high thermal and load life stability (0.05 % absolute, 0.02 % ratio, 2000 h at +70 °C at Pn) together with the added benefits of low noise and rapid rise time.

### SCHEMATIC



For other configurations, please consult factory.

### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	RESISTANCE RANGE Ω	POWER RATING PER RESISTOR W	POWER RATING PER PACKAGE $P_{70^{\circ}\text{C}}$ W	ABSOLUTE TOLERANCE ± %	RATIO TOLERANCE (2) ± %	ABSOLUTE TCR (1) ± ppm/°C	RATIO TCR ± ppm/°C
RMKMS	SO08	500 to 200K	0.050	0.250	0.1, 0.5, 1	0.05, 0.1, 0.5	10, 15	5
RMKMS	SO14	500 to 200K	0.050	0.500	0.1, 0.5, 1	0.05, 0.1, 0.5	10, 15	5
RMKMS	SO16	500 to 200K	0.050	0.500	0.1, 0.5, 1	0.05, 0.1, 0.5	10, 15	5

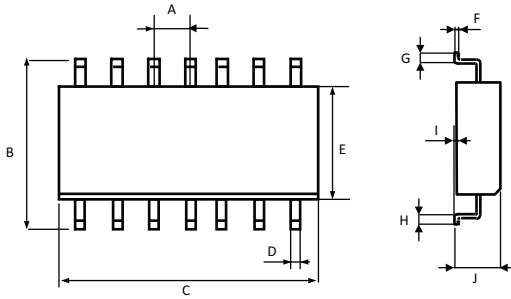
#### Notes

- (1) ± 10 ppm/°C at 0 °C to +70 °C; ± 15 ppm/°C at -55 °C to ± 125 °C  
 (2) 0.02 % upon request

### PERFORMANCES

TEST	SPECIFICATIONS	CONDITION
Stability: $\Delta R$ Absolute	0.05 %	2000 h at +70 °C at P
Stability: $\Delta R$ Ratio	0.02 %	2000 h at +70 °C at P
Voltage coefficient	< 0.1 ppm/V	
Working voltage	50 V <sub>DC</sub> maximum	
Operating temperature range	-55 °C to +125 °C	
Storage temperature range	-55 °C to +155 °C	
Noise	-35 dB (typical)	MIL-STD-202, meth. 308
Thermal EMF	0.1 $\mu\text{V}/^{\circ}\text{C}$	
High temp. storage Shelf life stability	0.075 %	2000 h at +125 °C
	0.025 %	2000 h at +125 °C

**DIMENSIONS AND IMPRINTING**



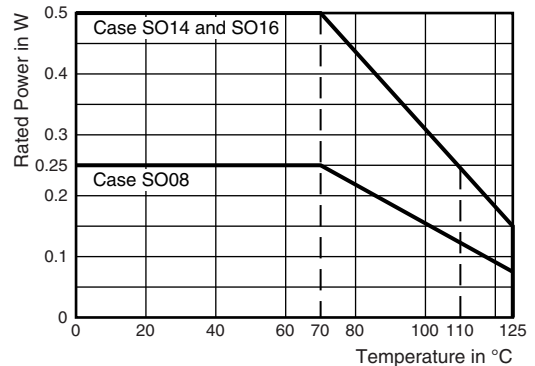
**Imprinting:**

VISHAY logo, series, ohmic value, tolerance, manufacturing date

DIMENSION	INCHES	MILLIMETERS
A	Pitch 0.05	Pitch 1.27
B	0.230/0.244	5.84/6.2
C (SO08)	0.189/0.196	4.80/4.98
C (SO14)	0.337/0.344	8.56/8.74
C (SO16)	0.386/0.393	9.80/9.98
D	0.014/0.020	0.35/0.51
E	0.150/0.157	3.81/3.99
F	0.007/0.010	0.17/0.254
G, H	0.016/0.035	0.40/0.89
I	0.004/0.010	0.10/0.254
J	0.061/0.068	1.55/1.73

MECHANICAL SPECIFICATIONS	
Mechanical protection	Epoxy molded assembly
Terminal leads	100 % tin
Resistive element	Passivated nichrome
Unit weight:	Case SO08 0.070 g
	Cases SO14, SO16 0.146 g

**DERATING CURVE**



MARKING				
TOLERANCE CODING				
A	B	D	F	X
0.1 %	0.1 %	0.5 %	1 %	0.1 %
0.05 %	0.1 %	0.1 %	0.5 %	0.02 % (on request only)

GLOBAL PART NUMBER INFORMATION																	
New Global Part Numbering: <b>RMKMS408-10KFDT99</b> (preferred part number format)																	
<b>R</b>	<b>M</b>	<b>K</b>	<b>M</b>	<b>S</b>	<b>4</b>	<b>0</b>	<b>8</b>	<b>-</b>	<b>1</b>	<b>0</b>	<b>K</b>	<b>F</b>	<b>D</b>	<b>T</b>	<b>9</b>	<b>9</b>	
GLOBAL MODEL		VALUE		ABS. TOLERANCE		RATIO TOLERANCE		PACKAGING		OPTION							
RMKMS408 RMKMS508 RMKMS816 RMKMS714 RMKMS914		Decimal: R or K		B = 0.1 % D = 0.5 % F = 1.0 %		D = 0.5 % B = 0.1 % W = 0.05 % P = 0.02 %		Blank = tube T <sup>(1)</sup> = tape		Leave blank if no option							
Custom Design: <b>CNM 1138</b>																	
CNM		1138		GLOBAL MODEL		REFERENCE		RMKMS 408		10K		1 % abs 0.5 % ratio		T		R0099	
HISTORICAL MODEL		VALUE		ABS. TOLERANCE AND RATIO TOLERANCE		PACKAGING		OPTION		Blank = tube T <sup>(1)</sup> = tape							
										Leave blank if no option							

**Note**

- For more information see "Codification of Packaging" table



<b>CODIFICATION OF PACKAGING</b>	
<b>CODE 18</b>	<b>PACKAGING</b>
<b>PLASTIC TAPE (in standard for all sizes)</b>	
T	100 min., 1 mult
TA	100 min., 100 mult
TB	250 min., 250 mult
TC	500 min., 500 mult
TD	1000 min., 1000 mult

**HISTORICAL PART NUMBER EXAMPLES**

- RMKMS816-10KBWT250 (tapes of 250 pieces)
- RMKMS816-1KDBT250 (tapes of 250 pieces)
- CNM1138T250 (tapes of 250 pieces)
- CNM1490T250 (tapes of 250 pieces)

Historical part numbers are not recommended, but can still be used for ordering.



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