

Vishay Sfernice

# 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.

#### TYPICAL PERFORMANCE

	ABSOLUTE	TRACKING
TCR	10 ppm/°C	5 ppm/°C
	ABSOLUTE	RATIO
TOL.	0.1 %	0.05 %

## **SCHEMATIC**

RMKM S408 **RMKM S508 RMKM S714 RMKM S914 RMKM S816** Case SO08 Case SO14 Case SO16 9 0 -O g R8 R7 10 o R6 -0 6 9 **-**0 6 R6 11 o -0 6 R5 R3 **R**3 10 O -0 5 10 -0 5 R5 ი 3 R6 R5 12 o -0 5 R2 -0 4 R4 11 C 0 2 13 o R3 R1 R3 12 12 0 -0 3 14 o -0 3 R2 0 2 13 0 -0 2 13 R2 R2 R1 15 o -0 2 R1 For other configurations, please consult factory.

STANDARD ELECTRICAL SPECIFICATIONS								
MODEL	SIZE	RESISTANCE RANGE Ω	POWER RATING PER RESISTOR W	POWER RATING PER PACKAGE P <sub>70°C</sub> W	ABSOLUTE TOLERANCE ± %	RATIO TOLERANCE (2) ± %	ABSOLUTE TCR <sup>(1)</sup> ± 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**

± 10 ppm/°C at 0 °C to +70 °C; ± 15 ppm/°C at -55 °C to ± 125 °C

(2) 0.02 % upon request

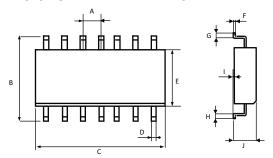
PERFORMANCES			
TEST	SPECIFICATIONS	CONDITION	
Stability: ∆R Absolute	0.05 %	2000 h at +70 °C at P	
Stability: ∆R Ratio	0.02 %	2000 h at +70 °C at P	
Voltage coefficient	< 0.1 ppm/V		
Working voltage	50 V <sub>DC</sub> maximum		
Operating temperature range	-55 °C to +125 °C		
Storage temperature range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

Revision: 18-Jul-2019 Document Number: 60004





### **DIMENSIONS AND IMPRINTING**

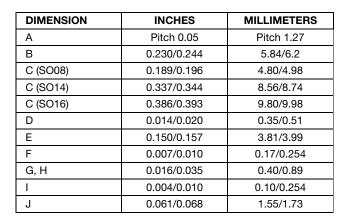


#### Imprinting:

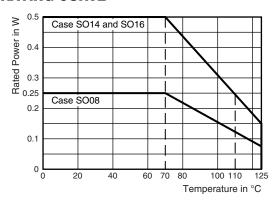
VISHAY logo, series, ohmic value, tolerance, manufacturing date

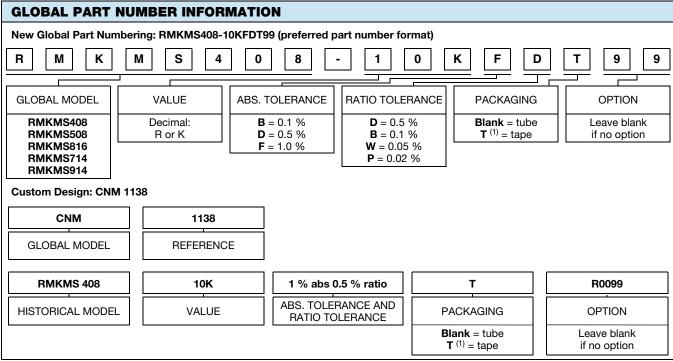
MECHANICAL SPECIFICATIONS			
Mechanical protection		Epoxy molded assembly	
Terminal leads	S	100 % tin	
Resistive elem	nent	Passivated nichrome	
Unit weight:	Case SO08	0.070 g	
	Cases SO14, SO16	0.146 g	

MARKING				
TOLERANCE CODING				
Α	В	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)



#### **DERATING CURVE**





## Note

• For more information see "Codification of Packaging" table



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CODIFICATION OF PACKAGING			
CODE 18	PACKAGING		
PLASTIC TAPE (in standard for all sizes)			
Т	100 min., 1 mult		
TA	100 min., 100 mult		
ТВ	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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