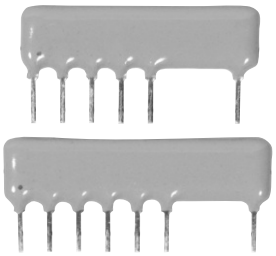
Decade Divider, Single-In-Line
Thin Film Resistor Networks (Standard)



Using these integrated thin film networks instead of discrete resistor sets, designers gain several advantages: Smaller size, better overall tracking, greater reliability, and lower cost.

FEATURES

- Tight TCR tracking down to 2.5 ppm
- Low voltage coefficient < 0.02 ppm/V
- Low noise index < - 30 dB
- 5 decades: 1 kΩ to 9 MΩ
- High stability 0.01 % on ratio (1000 h at Pn at + 70 °C)
- 6 decades: 100 Ω to 9 MΩ
- Standard
- 5 decades and 6 decades voltage divider
- Compliant to RoHS directive 2002/95/0EC

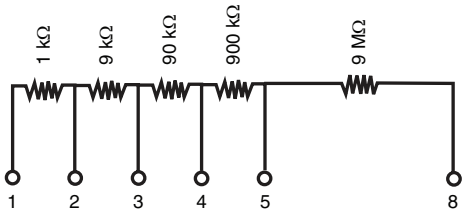
Pb-free RoHS COMPLIANT GREEN (5-2008)**

TYPICAL PERFORMANCE

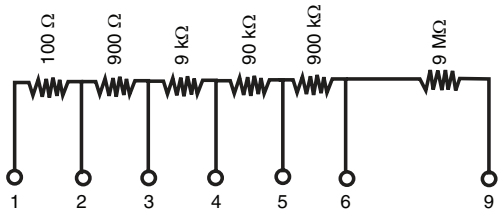
	ABS	TRACKING
TCR	< 25 ppm/°C	< 2.5 ppm/°C
	ABS	RATIO
TOL.	0.1 %	0.03 %

SCHEMATIC

5 Decades



6 Decades



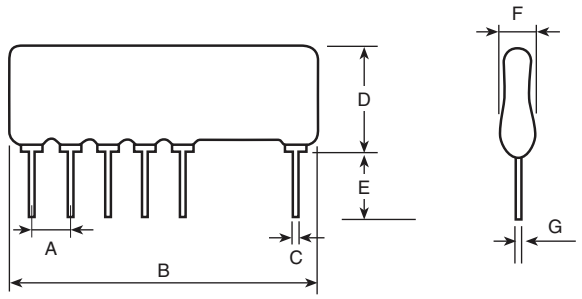
STANDARD ELECTRICAL SPECIFICATIONS			
TEST		SPECIFICATIONS	CONDITIONS
MATERIAL		PASSIVATED NICHROME	
Resistance range		100 Ω to 10 MΩ	
TCR	Tracking	< 2.5 ppm/°C	Except for 100R (5 ppm/°C)
	Absolute	< 25 ppm/°C	(0 °C to + 70 °C)
Toleracne	Ratio	A = ± 0.05 %, B = ± 0.1 %, C = ± 0.03 %	
	Absolute	± 0.1 %	(0 °C to + 70 °C)
Power rating	Resistor	0.1 W	
	Package	0.6 W	(0 °C to + 70 °C)
Stability	ΔR ratio	0.01 % typical	1000 h at + 70 °C at Pn
Voltage coefficient		< 0.02 ppm/V	
Working voltage		1200 V	
Operating temperature range		0 °C; + 70 °C	
Storage temperature range		- 55 °C to + 155 °C	
Noise		< - 30 dB typical	
Thermal EMF		0.1 µV/°C	
Shelf life stability (ratio)		50 ppm	1 year

** Please see document “Vishay Material Category Policy”: www.vishay.com/doc?99902

Decade Divider, Single-In-Line
Thin Film Resistor Networks (Standard)

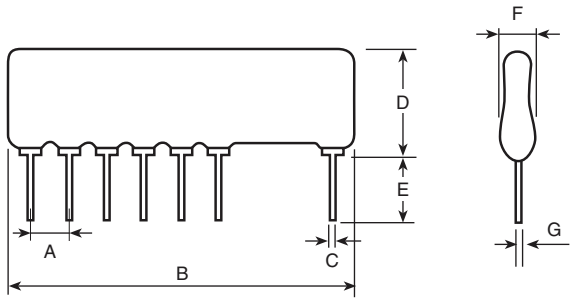
DIMENSIONS

5 Decades



DIMENSION	INCHES	MILLIMETERS
A	0.100	2.54
B	0.830	21.08
C	0.020	0.51
D	0.275	7 max.
E	0.125	3.17
F	0.100	2.54 max.
G	0.010	0.25

6 Decades



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MECHANICAL SPECIFICATIONS

Resistive material	Nichrome
Coating	Fluidized epoxy
Terminals	Tin/silver on copper alloy
Substrate material	Alumina
Marking resistance to solvents	Laser marking

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: CNS471A6

C	N	S	4	7	1	A	6

MODEL	TOLERANCE	NUMBER OF DECADES
CNS 471	**B** = 0.1 %; 0.1 % **A** = 0.1 %; 0.05 % **Q** = 0.1 %; 0.03 %	**5** **6**

Historical Part Number example: CNS 471 A 6 e2

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