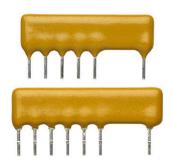


Decade Divider, Single-In-Line Through Hole Thin Film Resistor Networks (Standard)



LINKS TO ADDITIONAL RESOURCES



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 typical
- Low voltage coefficient < 0.02 ppm/V
- Low noise index < -30 dB
- 5 decades: 1 k Ω to 9 M Ω
- 6 decades: 100 Ω to 9 M Ω
- High stability 0.01 % on ratio (1000 h at Pn at +70 °C)





FREE GREEN

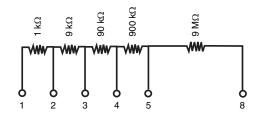
<u>GREEN</u> (5-2008)

TYPICAL PERFORMANCE

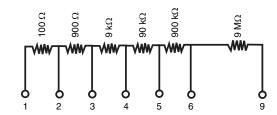
	ABS	TRACKING
TCR	± 25 ppm/°C	< 2.5 ppm/°C
	ABS	RATIO
TOL.	0.1 %	0.03 %

SCHEMATIC





6 Decades



STANDARD ELECTRICAL SPECIFICATIONS							
MODEL	$\begin{array}{c} \textbf{RESISTANCE} \\ \textbf{RANGE} \\ \Omega \end{array}$	POWER RATING PER RESISTOR W	POWER RATING PER PACKAGE 0 °C TO 70 °C W	ABSOLUTE TOLERANCE 0 °C TO 70 °C ± %	RATIO TOLERANCE (2) ± %	ABSOLUTE TCR 0 °C TO 70 °C ± ppm/°C	RATIO TCR ⁽¹⁾ ppm/°C
CNS 471	100 to 10M	0.1	0.6	0.1	0.03, 0.05, 0.1	25	2.5 typical

Notes

- (1) Except for 100R (5 ppm/°C)
- (2) $A = \pm 0.05 \%$, $B = \pm 0.1 \%$, $C = \pm 0.03 \%$

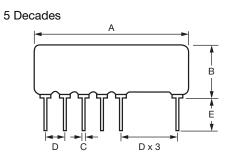
PERFORMANCES		
TEST	SPECIFICATIONS	CONDITIONS
Stability ΔR ratio	0.01 % typical	1000 h at +70 °C at Pn
Voltage coefficient	< 0.02 ppm/V	
Working voltage	1200 V	
Operating temperature range	0 °C; +70 °C	
Storage temperature range	-55 °C to +155 °C	
Noise	< -30 dB typical	
Thermal EMF	0.1 μV/°C	
Shelf life stability (ratio)	50 ppm	1 year

Revision: 25-Jul-2023 1 Document Number: 60043



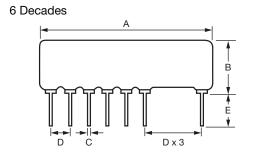
Vishay Sfernice

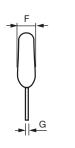
DIMENSIONS





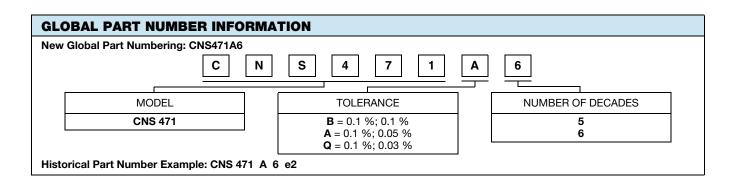
DIMENSION	INCHES	MILLIMETERS
Α	0.830	21.08 max.
В	0.261	6.62 max.
С	0.020	0.51
D	0.100	2.54
Е	0.125	3.17 min.
F	0.100	2.54 max.
G	0.010	0.25





DIMENSION	INCHES	MILLIMETERS
А	0.930	23.62 max.
В	0.261	6.62 max.
С	0.020	0.51
D	0.100	2.54
E	0.125	3.17 min.
F	0.100	2.54 max.
G	0.010	0.25

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





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