

Decade Divider, Single-In-Line Network



Precision resistor networks comprised of series-connected decade values are provided in single-in-line style with edge-mounted leads on 100 mil centers. Integrated thin film construction, laser-trimmed to extremely tight tolerances, insures exceptionally close tracking over temperature and throughout operating life, in either voltage division or current monitoring mode. Voltage coefficient and noise are extremely low. Designers gain several advantages over the use of discrete resistor sets, including smaller size, better overall tracking, greater reliability, and lower cost.

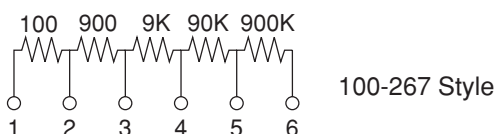
FEATURES

- Tight Ratio Tolerance
- 4 Decade Ratio Divider
- High Voltage Capability

TYPICAL PERFORMANCE

	ABS	TRACKING
TCR	25	2
	ABS	RATIO
TOL	0.1	0.01

SCHEMATIC

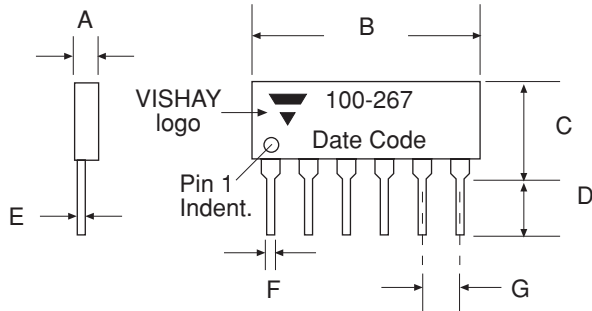


STANDARD ELECTRICAL SPECIFICATIONS

TEST	SPECIFICATIONS	CONDITIONS
MODEL	100-267	
TCR:	Tracking	$\pm 5\text{ppm}/^\circ\text{C}$
	Absolute	$\pm 25\text{ppm}/^\circ\text{C}$
Tolerance:	Ratio	± 0.01 to $\pm 0.1\%$
	Absolute	$\pm 0.1\%$
Power Rating:	Resistor	100 mWatt
	Package	500 mW
Stability:	ΔR Ratio	1000ppm Absolute
Voltage Coefficient		0.1ppm/Volt
Working Voltage		300 Volts
Operating Temperature Range		0°C to $+70^\circ\text{C}$
Storage Temperature Range		-55°C to $+125^\circ\text{C}$
Noise		-20 dB
Thermal EMF		$0.08 \mu\text{V}/^\circ\text{C}$
Shelf Life Stability:	Absolute	100ppm
	Ratio	20ppm
		1 year @ $+25^\circ\text{C}$
		1 year @ $+25^\circ\text{C}$

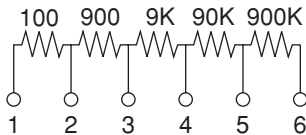


DIMENSIONS AND IMPRINTING in inches and millimeters



DIMENSION	INCHES	MILLIMETERS
A	0.100 Max.	2.54
B	0.620 Max.	15.78
C	0.350 Max.	8.89
D	0.125 Min.	0.25
E	0.010 Typ.	2.54
F	0.020 Typ.	0.51
G	0.1(5X) Typ.	2.54

Part Number 100-	267-T	267-Q	267-A	267-B
Ratio Tolerance	*0.01%	0.025%	0.05%	0.1%
Voltage Rating	300 Volts			
Noise Index	< - 30dB			
*Excluding the 100 ohm				



$$\frac{R1 + R2 + R3 + R4}{RT} = \frac{100K \text{ ohms}}{1 \text{ Megohm}} = 0.1$$

$$\frac{R1 + R2 + R3}{RT} = \frac{10K \text{ ohms}}{1 \text{ Megohm}} = 0.01$$

$$\frac{R1 + R2}{RT} = \frac{1K \text{ ohms}}{1 \text{ Megohm}} = 0.001$$

$$R1 = 100 \text{ ohms } \pm 0.1\%$$

THROUGH HOLE

MECHANICAL SPECIFICATIONS	
Resistive Element	Tamelox®
Substrate Material	Alumina
Body	Conformal Coated
Terminals	Copper Alloy
Plating	Sn60
Marking Resistance to Solvents	Per MIL-PRF-83401

How to Order

Series	Model	Tolerance
100	267	T
	267 = 6 Pin SIP 100 ohms to 900K ohms	T = 0.01% Ratio Q = 0.025% Ratio A = 0.05% Ratio B = 0.1% Ratio

Example: 100-267Q is a 7 Pin 100 ohms to 9K ohms Single In Line with a Ratio Tolerance of 0.025%