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.

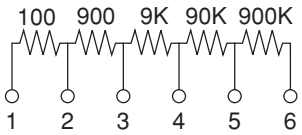
FEATURES

- 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



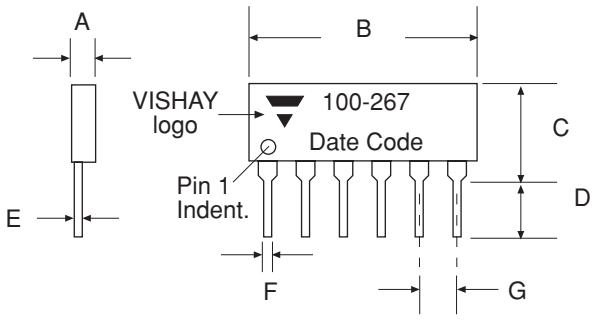
100-267 Style

THROUGH HOLE

STANDARD ELECTRICAL SPECIFICATIONS			
TEST		**SPECIFICATIONS**	**CONDITIONS**
MODEL		**100-267**	
TCR:	**Tracking**	± 5ppm/°C	0°C to + 70°C
	Absolute	± 25ppm/°C	0°C to + 70°C
Tolerance:	**Ratio**	± 0.01 to ± 0.1%	+ 25°C
	Absolute	± 0.1 %	+ 25°C
Power Rating:	**Resistor**	100 mWatt	Max at + 70°C
	Package	500 mW	Max at + 70°C
Stability:	**ΔR Ratio**	1000ppm Absolute	2000 hrs. @ + 70°C
Voltage Coefficient		0.1ppm/Volt	
Working Voltage		300 Volts	
Operating Temperature Range		0°C to + 70°C	
Storage Temperature Range		-55°C to + 125°C	
Noise		-20 dB	
Thermal EMF		0.08 μ V/°C	
Shelf Life Stability:	**Absolute**	100ppm	1 year @ +25°C
	Ratio	20ppm	1 year @ +25°C

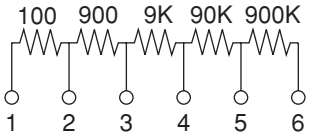
VISHAY THIN FILM • FRANCE +33.4.93.37.28.24 FAX: +33.4.93.37.27.31 • GERMANY +49.9287.710 FAX: +49 9287.70435 • ISRAEL +972.3.557.0945 FAX: +972.3.558.9121 • ITALY + 39.2.300.11919 FAX: +39.2.300.11999 • JAPAN +81.42.729.0661 FAX: +81.42.729.3400 • SINGAPORE +65.788.6668 FAX: +65.788.0988 • SWEDEN +46.8.594.70590 FAX: +46.8.594.70581 • UK +44 191 514 8237 FAX: +44 1953 457 722 • USA: (610) 407-4800 FAX: (610) 640-9081

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				



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

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

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

$$R1 = 100\ ohms \pm 0.1\%$$

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%