

100-267

Vishay Thin Film



Decade Divider, Single In-Line Network



Precision resistor networks comprised of series-connected decade values are provided in single-in-line style with edgemounted 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

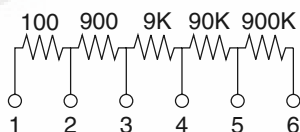
- Lead (Pb)-free available
- Tight Ratio Tolerance (0.01 %)
- 5 Decade Ratio Divider
- High Voltage Capability (300 V)

RoHS*
COMPLIANT

TYPICAL PERFORMANCE

	ABS	TRACKING
TCR	25	2
	ABS	RATIO
TOL	0.1	0.01

SCHEMATIC



100-267 Style

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	$\pm 0.01 \% \text{ to } \pm 0.1 \%$
	Absolute	$\pm 0.1 \%$
Power Rating:	Resistor	100 mW
	Package	500 mW
Stability:	ΔR Ratio	1000 ppm absolute
Voltage Coefficient		0.1 ppm/V
Working Voltage		300 V
Operating Temperature Range		0 $^{\circ}\text{C}$ to + 70 $^{\circ}\text{C}$
Storage Temperature Range		- 55 $^{\circ}\text{C}$ to + 125 $^{\circ}\text{C}$
Noise		- 20 dB
Thermal EMF		0.08 $\mu\text{V}/^{\circ}\text{C}$
Shelf Life Stability:	Absolute	100 ppm
	Ratio	20 ppm

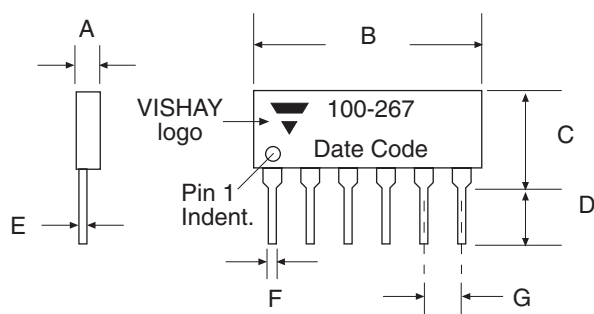
Pb containing terminations are not RoHS compliant, exemptions may apply



**100-267**

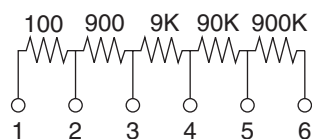
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DIMENSIONS AND IMPRINTING in inches and millimeters

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 V			
Noise Index	< - 30 dB			
* Excluding the 100 Ω				



$$\frac{R1 + R2 + R3 + R4}{RT} = \frac{100 \text{ k}\Omega}{1 \text{ M}\Omega} = 0.1$$

$$\frac{R1 + R2 + R3}{RT} = \frac{10 \text{ k}\Omega}{1 \text{ M}\Omega} = 0.01$$

$$\frac{R1 + R2}{RT} = \frac{1 \text{ k}\Omega}{1 \text{ M}\Omega} = 0.001$$

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

MECHANICAL SPECIFICATIONS

Resistive Element	Passivated Nichrome
Substrate Material	Alumina
Body	Conformal Coated
Terminals	Copper Alloy
Plating	Sn60
Marking Resistance to Solvents	per MIL-PRF-83401
Lead (Pb)-free Option	96.5 % Sn, 3.0 % Ag, 0.5 % Cu
Lead (Pb)-free Finish	Hot Solder Dip

HOW TO ORDER

New Global Part Numbering: VTF100-267TUF (preferred part number format)

V	T	F	1	0	0	-	2	6	7	T	B	X	
V	T	F	1	0	0	S	-	2	6	7	T	B	X

SERIES MODEL (10 or 11 digits)
VTF100-267 (Tin Lead)
VTF100S-267 (Lead (Pb)-free) (e1)

TOLERANCE (1 digit)
T = 0.01 % Ratio Q = 0.025 % Ratio A = 0.05 % Ratio B = 0.1 % Ratio

PACKAGING (2 digits)
BX = BOXED

Historical Part Number example: 100-267Q (will continue to be accepted)

100
SERIES

267
MODEL

T
TOLERANCE



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All product specifications and data are subject to change without notice.

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