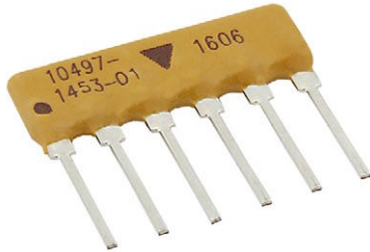
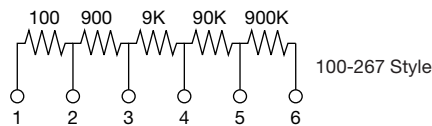


Decade Divider, Single In-Line, Thin Film Divider, Through Hole Resistor Network



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.

SCHEMATIC



FEATURES

- Tight ratio tolerance (0.01 %)
- 5 decade ratio divider
- High voltage capability (300 V)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



Note

* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non-RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details.

TYPICAL PERFORMANCE

	ABSOLUTE	TRACKING
TCR	25	5
	ABSOLUTE	RATIO
TOL.	0.1	0.01

STANDARD ELECTRICAL SPECIFICATIONS

TEST	SPECIFICATIONS	CONDITIONS
Material	Passivated nichrome	-
Pin/Lead Number	6	-
Resistance Range	100 Ω to 1 M Ω total	-
TCR: Absolute	± 25 ppm/ $^{\circ}$ C	0 $^{\circ}$ C to +70 $^{\circ}$ C
TCR: Tracking	± 5 ppm/ $^{\circ}$ C	0 $^{\circ}$ C to +70 $^{\circ}$ C
Tolerance: Absolute	± 0.1 %	+25 $^{\circ}$ C
Tolerance: Ratio	± 0.01 % to ± 0.1 %	+25 $^{\circ}$ C
Power Rating: Resistor	0.100 W	Maximum at +70 $^{\circ}$ C
Power Rating: Package	0.500 W	Maximum at +70 $^{\circ}$ C
Stability: Absolute	1000 ppm	2000 h at +70 $^{\circ}$ C
Stability: Ratio	200 ppm	2000 h at +70 $^{\circ}$ C
Voltage Coefficient	0.1 ppm/V	-
Working Voltage	300 V	-
Operating Temperature Range	0 $^{\circ}$ C to +70 $^{\circ}$ C	-
Storage Temperature Range	-55 $^{\circ}$ C to +125 $^{\circ}$ C	-
Noise	- 20 dB	-
Thermal EMF	0.08 μ V/ $^{\circ}$ C	-
Shelf Life Stability: Absolute	$\Delta R \pm 0.01$ %	1 year at +25 $^{\circ}$ C
Shelf Life Stability: Ratio	$\Delta R \pm 0.002$ %	1 year at +25 $^{\circ}$ 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 (5 x) typ.	2.54	

PART NUMBER 100-	267-T	267-Q	267-A	267-B
Ratio Tolerance ⁽¹⁾	0.01 %	0.025 %	0.05 %	0.1 %
Voltage Rating	300 V			
Noise Index	< -30 dB			

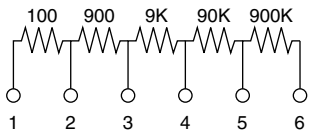
Note
⁽¹⁾ Excluding the 100 Ω

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

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

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

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



MECHANICAL SPECIFICATIONS	
Resistive Element	Passivated nichrome
Substrate Material	Alumina
Body	Conformal coated
Terminals	Copper alloy
Marking Resistance to Solvents	Per MIL-PRF-83401
Tin/Lead Option	Sn60 - Sn63
Lead (Pb)-free Option	Sn96.5, Ag3.0, Cu0.5
Tin/Lead and Lead (Pb)-free Finish	Hot solder dip

GLOBAL PART NUMBER INFORMATION		
New Global Part Numbering: VTF100-267TUF		
<div style="display: flex; justify-content: space-around;"> VTF100-267TUF </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> VTF100S-267TUF </div>		
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) UF = Tubed
Historical Part Number example: 100-267Q (for reference purposes only)		
<div style="border: 1px solid black; padding: 5px; width: 100px; margin: 0 auto;">100</div> SERIES	<div style="border: 1px solid black; padding: 5px; width: 100px; margin: 0 auto;">267</div> MODEL	<div style="border: 1px solid black; padding: 5px; width: 100px; margin: 0 auto;">Q</div> TOLERANCE



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