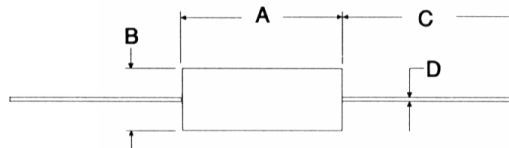


VER Series — Vitreous Enameled - General Purpose/Precision

Features

- High power dissipation for size
- High stability and reliability
- Overload characteristics ideal for protection circuits
- Suitable for harsh environments
- Impervious lead free vitreous enamel coating

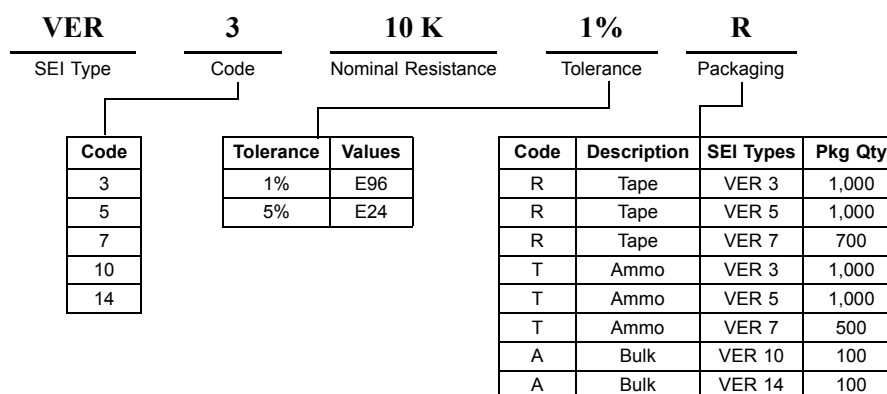


Electrical Specifications					
Type	Power Rating (Watts) @ 25°C	Maximum Working Voltage*	Resistance Temperature Coefficient	Ohmic Range and Tolerance	
				1%	5%
VER 3	3W	100	±200 ppm/°C	1Ω – 10K	0.1Ω – 10K
VER 5	5W	160	±200 ppm/°C	1Ω – 15K	0.1Ω – 15K
VER 7	7W	200	±200 ppm/°C	1Ω – 21.5K	0.11Ω – 20K
VER 10	10W	500	±200 ppm/°C	1Ω – 54.9K	0.15Ω – 56K
VER 14	14W	750	±200 ppm/°C	1Ω – 100K	0.2Ω – 100K

* Lesser of \sqrt{PR} or maximum working voltage.

Mechanical Specifications					
Type	A Body Length (max)	B Body Diameter (max)	C Lead Length (min)	D Lead Diameter (nom)	Units
VER 3	0.5 12.7	0.22 5.6	0.9 22.9	0.032 0.80	inches mm
VER 5	0.87 22.0	0.28 7.1	0.91 23.1	0.032 0.80	inches mm
VER 7	0.87 22.1	0.31 7.9	0.91 23.1	0.032 0.80	inches mm
VER 10	1.5 38.0	0.31 7.9	1.18 30.0	0.032 0.80	inches mm
VER 14	2.11 53.6	0.31 7.9	1.18 30.0	0.032 0.80	inches mm

How to Order



VER Series — Vitreous Enameled - General Purpose/Precision

Performance Characteristics			
Test		Maximum	Typical
Load at commercial rating: 1000 hours at 25°C	ΔR%	5	3.5
Load at CECC rating: 1000 hours at 25°C	ΔR%	5	3.5
Dry Heat: 1000 hours at 200°C	ΔR%	2	1
Shelf Life: 12 months at room temperature	ΔR%	0.03	0.02
Short term overload	ΔR%	1.0	0.2
Climatic	ΔR%	0.5	0.2
Long term damp heat	ΔR%	0.05	0.02
Temperature rapid change	ΔR%	0.5	0.2
Resistance to solder heat	ΔR%	0.25	0.03
Vibration and bump	ΔR%	0.25	0.05
Noise (in a decade of frequency)	μV/V	Zero	Zero
Robustness	ΔR%	0.4	0.05
Insulation resistance	Ohms	>100MΩ	>100MΩ
Voltage Proof	Volts	500 min	500 min

Part Marking Instructions

These resistors are marked with series identification, resistance value and tolerance.

Series Identification:

VER 3 = W21
 VER 5 = W215
 VER 7 = W22
 VER 10 = W23
 VER 14 = W24

