



Leaded Dual Function Varistors

VK and VM Series, 125°C



Why Choose KEMET

KEMET Electronics Corporation is a leading global supplier of electronic components. We offer our customers the broadest selection of capacitor technologies in the industry, along with an expanding range of electromechanical devices, electromagnetic compatibility solutions and supercapacitors. Our vision is to be the preferred supplier of electronic component solutions for customers demanding the highest standards of quality, delivery and service.

Features & Benefits

- Through-hole form factor
- Operating ambient temperature of -40°C to +125°C
- Dimension and weight savings
- X7R capacitor temperature characteristics
- AEC-Q200 grades available
- RoHS compliant

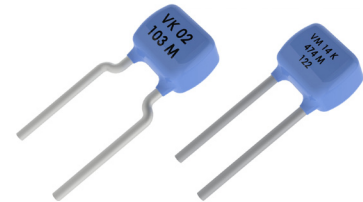
Product Checklist

- What is the operating voltage of the system to be protected?
- What is the maximum transient voltage that the protected system can withstand?
- What overvoltages can the system be exposed to? Wave shape? Amplitude? Duration? Is the surge repeatable or not? How much power would be dissipated?
- What are the operational conditions of your application? Do you have a specification available?
- Does the application have size constraints? If so, what are they?

For more information, samples and engineering kits, please visit us at www.kemet.com or call 1.877.myKEMET.

Applications

- Automotive electronic systems
- Telecommunications infrastructure
- Industrial & commercial device protection
- Electrostatic surge absorption
- Relay surge suppression
- Effect and relay reset time
- Voltage transient protection
- Radio frequency noise suppression



Electrical/Physical Characteristics

Series	Case Sizes (mm)	Steady State Applied Voltage		Transient	
		DC Voltage Range (VDC)	AC Voltage Range (Vrms)	Peak Single Pulse Surge Current, 8/20 μs (Imax)	Single Pulse Surge Energy, 10/1,000 μs (Wmax)
VK	6 x 9	3 to 125	2 to 95	150 A	0.1 to 2.5 J
VM	7.5 x 9 8 x 12	16 to 56	14 to 40	800 to 1,200 A	2.4 to 10.5 J

Ordering Information

VK Series							
VK	103	M	M	151	R	002	P050
Series	Capacitance Code (nF)	Capacitance Tolerance Code	Tolerance of Varistor Voltage	Max Surge Current Code	Packaging/Lead Style	Maximum Continuous Working Voltage (Vrms AC)	Pitch Code
Varistor Dual Function Leaded 125°C Low Voltage/ Capacitor (X7R Dielectric)	103 = 10 104 = 100 105 = 1,000	M = ±20%	K = ±10% L = ±15% M = ±20%	151 = 150 A	B = Bulk R = Reel	002 = 2 004 = 4 006 = 6 008 = 8 011 = 11 014 = 14 017 = 17 020 = 20 025 = 25 030 = 30 035 = 35 040 = 40 050 = 50 060 = 60 095 = 95	P050 = 5 mm

VM Series							
VM	474	M	K	801	R	014	P050
Series	Capacitance Code (μF)	Capacitance Tolerance Code	Tolerance of Varistor Voltage	Max Surge Current Code	Packaging/Lead Style	Maximum Continuous Working Voltage (Vrms AC)	Pitch Code
Varistor Dual Function Leaded 125°C Automotive Grade/ Capacitor (X7R Dielectric)	474 = .47 105 = 1.0 155 = 1.5	M = ±20%	K = ±10%	801 = 800 A 122 = 1,200 A	B = Bulk / Straight Lead R = Reel / Straight Lead	12 V Power Supply 014 = 14 017 = 17 24 V Power Supply 020 = 20 030 = 30 42 V Power Supply 040 = 40	P050 = 5 mm P120 = 12 mm