Leaded Varistors VK Dual Function Low Voltage Automotive Grade 125°C

Overview

KEMET's VK series of dual function protective devices protect against voltage surges in a low voltage region and against high frequency noise, replacing two components, those being a low voltage varistor and a capacitor.

KEMET's VK series incorporate a varistor function in the DC voltage range from 3 – 125 V (up to 170 V upon request) and function as high frequency by-pass capacitors operating in the capacitance range from 10 nF – 1 μ F. Lower capacitance values are also available. They are intended for protection of all sensitive electronic devices experiencing both voltage transients and high frequency noise produced by electromechanical devices, such as buzzers, relays, etc.

KEMET's VK series are square shaped components with inline leads and require at least 30% less mounting space.

Applications

Typical applications include electrostatic surge absorption, relay surge suppression effect and relay reset time, and piezoelectric buzzer shock noise absorption in micro controllers, relays, DC and micro motors, exchangers, phone terminals and antennas as well as automobile electronics including wiper motors, central locking systems, seat adjustment motors, seat heating, and electric window systems.

Benefits

- AEC-Q200 qualified Grade 1
- Through-hole form factor
- Operating ambient temperature of -40°C to +125°C
- Operating voltage range of 3 125 VDC
- Operating voltage range (V_{rms}) 2 95 V
- Capacitance range at 1 kHz of 10 nF 1 μ F
- · Capacitor temperature characteristics X7R
- · Dimensional and weight savings on the board
- One standard model size available, 6 x 9 mm
- · RoHS 2 2011/65/EC, REACH compliant







Ordering Information

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

Please contact your local Sales Representative for more information on available Part Numbers.

Dimensions – Millimeters



As per part number table.

Environmental Compliance

RoHS 2 2011/65/EC, REACH