

Overview

KEMET's VM series of dual function protective devices protect against voltage surges in an automotive voltage region and against radio frequency noise. This component replaces two components – a low voltage varistor and a capacitor.

KEMET's VM series incorporate a varistor function in automotive applications in a voltage region of 12 V, 24 V and 42 V and a function of a radio-frequency filtering capacitor in a high capacitance range from 0.47 – 1.5 μF , making them ideal for protection in automobile electronic applications.

KEMET's VM series are square shaped components with in-line leads and require at least 30% less mounting space.

Applications

Typical applications include the protection against voltage transients and suppression of radio-frequency interference in 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 $+125^{\circ}\text{C}$
- Supply voltage of 12, 24, and 42 V
- Operating voltage of 16 – 56 VDC
- Capacitance range at 1 kHz of 0.47 – 1.5 μF
- X7R capacitor temperature characteristics
- Dimensional and weight savings on the board
- RoHS 2 2011/65/EC, REACH compliant

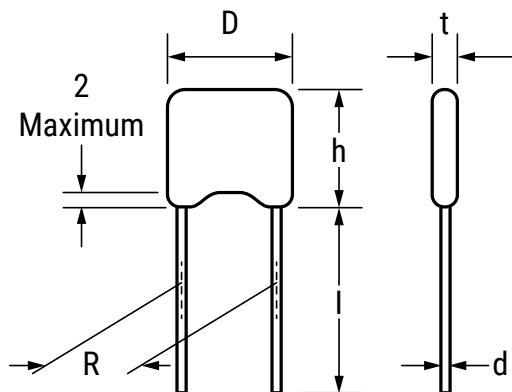


Ordering Information

VM	474	M	K	801	R	014	P050
Series	Capacitance Code (μF)	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 Automotive Grade Varistor/ Capacitor (X7R Dielectric)	474 = 0.47 105 = 1.0 155 = 1.5	M = ±20%	K = ±10%	801 = 800 A 122 = 1,200 A	R = Bulk /Straight Lead B = Reel /Straight Lead	12 V Power Supply 014 = 14 Vrms AC 017 = 17 Vrms AC 24 V Power Supply 020 = 20 Vrms AC 030 = 30 Vrms AC 42 V Power Supply 040 = 40 Vrms AC	P050 = 5mm P120 = 12mm

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

KEMET Electronics Corporation Sales Offices

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Although KEMET designs and manufactures its products to the most stringent quality and safety standards, given the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage.

Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated or that other measures may not be required.

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