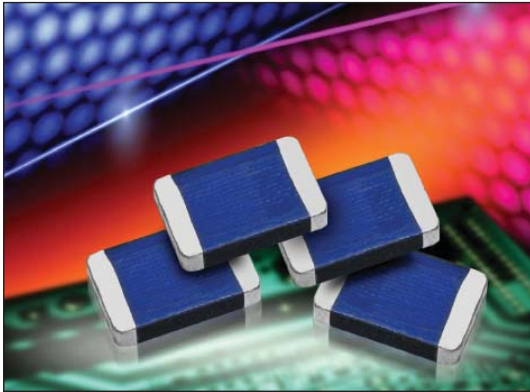


# Single Layer Varistors

## VC32 Series

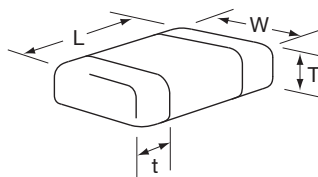


### GENERAL DESCRIPTION

The VC32 Series offers the designer a surface mount solution with higher voltage ratings and transient energy ratings than typical multi-layer varistors (MLVs). Think of this series as *surface mountable MOVs*. This series, based on our proven zinc oxide formulation, operates from -55°C to 125°C. Additionally, the top and bottom surfaces of the chip are protected with a glass coating.

### APPLICATIONS

- MOV (Radial) Replacement
- Industrial Equipment
- Suppression of transient on line voltage
- Mains PSUs
- Electric Meters
- Telecommunications
- Consumer Electronics



### PART DIMENSIONS

mm (inches)

L	W	T	t
7.90 - 8.51 (0.311 - 0.335)	4.70 - 5.26 (0.185 - 0.207)	2.03 MAX (0.080 MAX)	0.40 - 1.30 (0.016 - 0.051)

### PART SPECIFICATIONS

Part No.	V1mA (nominal)	Vrms	Vdc	Leakage Current (max. $\mu$ A)	Maximum Clamping Voltage (80/20 $\mu$ s)		Maximum peak current (8/20 $\mu$ s) Ip(A)				Maximum absorption (10/1000 $\mu$ s)	Typical capacitance 1kHz/0.5V
	V	V	V	$\mu$ A	Vp (V)	Ip (A)	2 Surge	10 Surge	20 Surge	100 Surge	J	pF
VC32M01750K--	270	175	225	200	455	10	200	100	80	50	15.0	135
VC32M00231K--	360	230	300	50	595	10	200	100	80	50	20.0	100
VC32M00251K--	390	250	330	50	650	10	200	100	80	50	21.0	90
VC32M02750K--	430	275	368	50	710	10	200	100	80	50	23.0	80
VC32M00301K--	470	300	385	50	775	10	200	100	80	50	23.0	70

### HOW TO ORDER

**VC32**



**Type**  
VC3220

**M0**



**Series**  
M = General Applications

**0251**



**AC Operating Voltage**  
EIA Coding  
e.g. 0251 = 250V<sub>AC</sub>

**K**



**Tolerance of 1mA**  
K = 10%

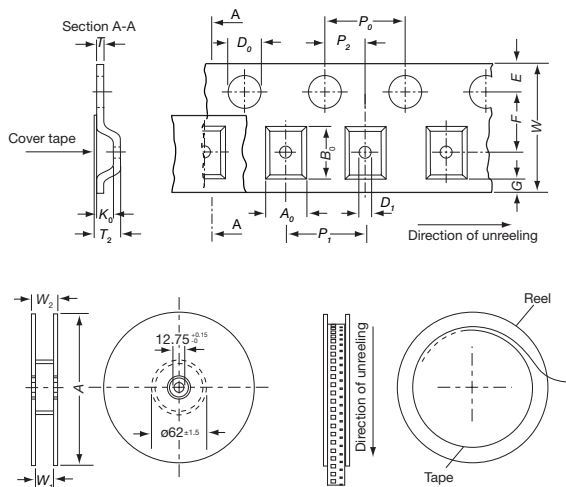
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**Packaging Suffix**  
-- = Bulk  
BG = Tape and Reel



### PACKAGING



### Tape Dimensions

mm (inches)

Tape Size	16 (0.630) VC32	Tolerance
A <sub>0</sub> x B <sub>0</sub>	5.3 x 8.7 (0.209 x 0.043)	±0.50 (0.20)
K <sub>0</sub>	2.50 (0.098)	max.
T <sub>2</sub>	3.00 (0.118)	max.
T	0.30 (0.012)	±0.10 (0.004)
D <sub>0</sub>	1.50 (0.059)	+0.10/-0 (0.004/-0)
D <sub>1</sub>	1.50 (0.059)	min.
P <sub>0</sub>	4.00 (0.157)	±0.10 <sup>1)</sup> (0.004 <sup>1)</sup> )
P <sub>2</sub>	2.00 (0.079)	±0.10 (0.004)
P <sub>1</sub>	8.00 (0.315)	±0.10 (0.004)
W	16.00 (0.630)	±0.30 (0.012)
E	1.75 (0.069)	±0.10 (0.004)
F	7.50 (0.295)	±0.10 (0.004)
G	0.75 (0.030)	min.

1) ±0.2 (0.008) over 10 sprocket holes

### Reel Dimensions

Size	VC 32
A (mm)	330 <sub>-2</sub>
W <sub>1</sub>	16.4 <sub>+1.5/-0</sub>
W <sub>2</sub>	22.4

### Packing Quantity

Type	Pieces/reel
VC 32	1000

