



## Features

- Meets IEC 61000-4-5 standard
- Compact size for EIA 1206
- Quick response time (< 0.5 ns)
- High transient current capability
- Lead free
- RoHS compliant\*

## Applications

- Power supplies
- Entertainment electronics
- White goods

# BVR1206 SMD Series - Low Voltage Varistors

### Description

The Model BVR1206 Low Voltage Multilayered Varistor Series is designed to protect sensitive electronic devices against high voltage surges in the low voltage regions. These varistors offer excellent transient energy absorption due to improved energy volume distribution and power dissipation. The Model BVR1206 Series is available with 5.5 to 16 VDC working voltages.

Model BVR Series Varistors are typically utilized to protect integrated circuits and other components at the circuit board level.

### Additional Information

Click these links for more information:



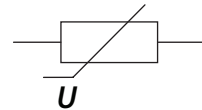
### Electrical Characteristics @ 25 °C (unless otherwise noted)

Model	V <sub>rms</sub> (V)	VDC (V)	V <sub>n</sub> Min. (V)	V <sub>n</sub> Max. (V)	V <sub>c</sub> (V)	I <sub>max</sub> (A)	C <sub>p</sub> Typ. (pF)
	<10 μA		1 mA DC		1 A @ 8/20 μs	@ 8/20 μs	@ 1 KHz
BVR1206-04PF	4	5.5	8	14	25	200	2000
BVR1206-11PF	11	14	18	22	36	200	840
BVR1206-14PF	14	16	22	28	42	200	900

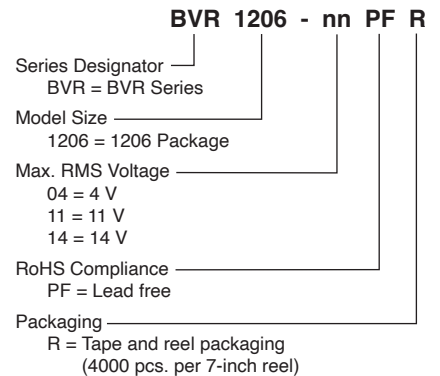
### Environmental Characteristics

Operating Temperature.....	-40 °C to +125 °C
Storage Temperature.....	-40 °C to +125 °C
Standard.....	IEC 61000-4-5
Moisture Sensitivity Level.....	1
ESD Classification (HBM).....	N/A

### Device Symbol



### How to Order



Asia-Pacific: Tel: +886-2 2562-4117 • Email: [asiacus@bourns.com](mailto:asiacus@bourns.com)

EMEA: Tel: +36 88 885 877 • Email: [eurocus@bourns.com](mailto:eurocus@bourns.com)

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[www.bourns.com](http://www.bourns.com)



**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice.

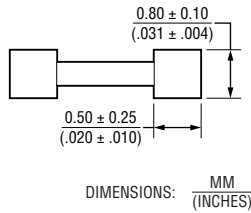
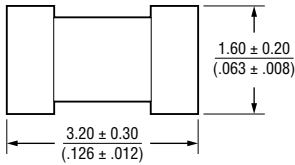
Users should verify actual device performance in their specific applications.

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# BVR1206 SMD Series - Low Voltage Varistors

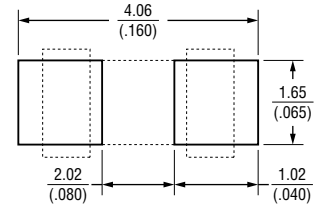


## Product Dimensions



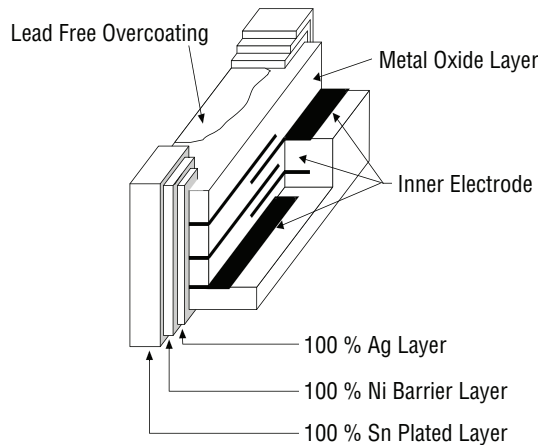
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

## Recommended Pad Layout

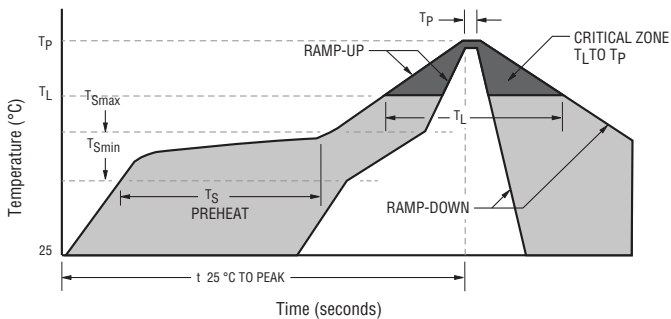


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

## Construction



## Solder Reflow Recommendations



A	Stage 1 Preheat Ramp	Ambient to Preheating Temperature	3 °C/s max.
B	Stage 2 Preheat	Preheat min./max. Temperature Range	150 °C to 200 °C 60 s to 180 s
C	Stage 3 Preheat to Main Heating	Max. Time Above Stated Temperature	217 °C 60 s to 150 s
D	Main Heating	Max Time Within 5 °C of Peak Temperature (260 °C)	255 °C 20 s to 40 s
E	Cool Down	Rate from Peak Temperature	6 °C/s max.

### CAUTION:

- This product can be damaged by rapid heating, cooling or localized heating.
- Heat shocks should be avoided. Preheating and gradual cooling recommended.
- Solder gun tip temperature should be kept below 280 °C and should not touch the device directly. Contact should be less than 3 seconds. A solder gun under 30 watts is recommended.
- Excess solder volume can damage the body of the product.

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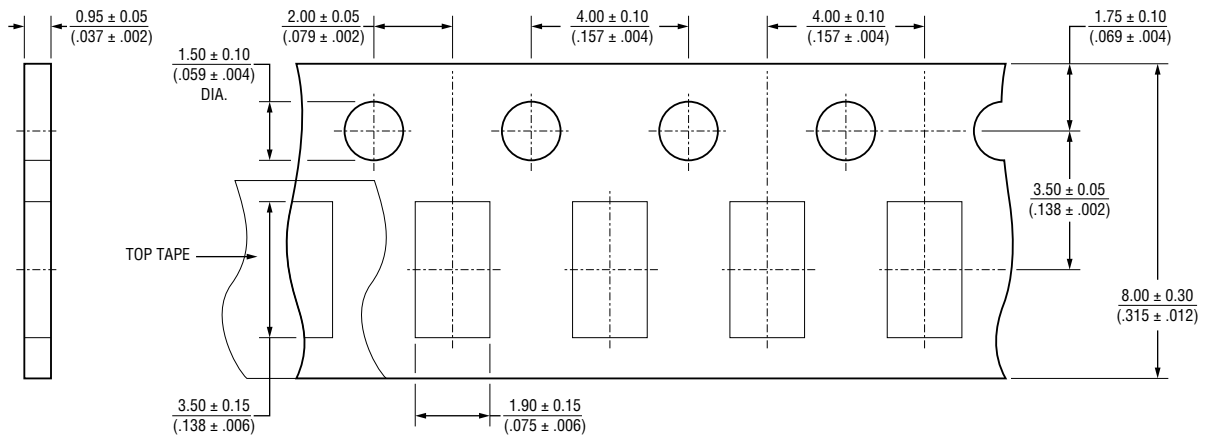
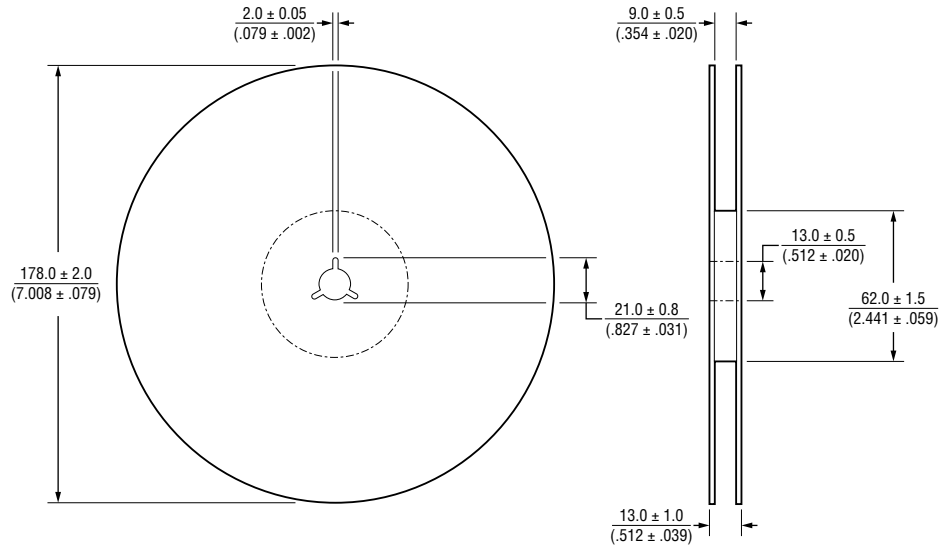
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# BVR1206 SMD Series - Low Voltage Varistors



## Packaging Dimensions



**USER DIRECTION OF FEED**  
 QTY: 4000 PCS. PER REEL

DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

REV. 12/23

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