

Features

- Meets IEC 61000-4-5 standard
- Compact EIA 1206 size
- Quick response time (< 0.5 ns)
- High transient current capability
- Lead free
- AEC-Q200 compliant
- RoHS compliant*

Applications

- Power supplies
- Entertainment electronics
- Circuit board level protection against transient events
- CAN, LIN, FLEXRAY based modules
- Module load dump protection
- Motor/inductive load transient suppression

BVRA1206 Automotive Grade SMD Low Voltage Varistor Series

Description

The Bourns® Model BVRA1206 Low Voltage Multilayered Varistor Series is designed specifically for use in automotive circuits requiring surge protection. This series offers excellent transient energy absorption due to improved energy volume distribution and power dissipation. The Model BVRA1206 Series is available with working voltages from 5.5 to 85 V_{DC}.

Model BVRA Series varistors are typically applied to protect integrated circuits and other components at the circuit board level.

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

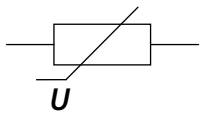
Electrical Characteristics @ 25 °C (unless otherwise noted)

Model	V_{rms} (V)	V_{DC} (V)	V_n Min. (V)	V_n Max. (V)	V_c (V)	I_{max} (A)	W_{max} (J)	C_P Typ. (pF)
	<10 μA		1 mA DC		1 A @ 8/20 μs	@ 8/20 μs	@ 10/1000 μs	@ 1 KHz
BVRA1206-04PF	4	5.5	8	14	25	200	0.3	2000
BVRA1206-11PF	11	14	18	22	36	200	0.5	840
BVRA1206-14PF	14	16	22	28	42	200	0.6	900
BVRA1206-17PF	17	22	25	32	48	200	0.3	780
BVRA1206-20PF	20	26	29.7	37.3	58	200	0.7	600
BVRA1206-25PF	25	31	36	44	69	200	1	650
BVRA1206-30PF	30	38	45	55	81	200	1.1	600
BVRA1206-35PF	35	45	54	62	108	200	1.1	230
BVRA1206-40PF	40	56	66	82	110	200	1	220
BVRA1206-50PF	50	65	77	93	138	100	0.5	250
BVRA1206-60PF	60	85	104	126	168	100	0.7	120

Environmental Characteristics

Operating Temperature..... -40 °C to +125 °C
Storage Temperature..... -40 °C to +125 °C
Standard..... IEC 61000-4-5

Device Symbol



How to Order

BVRA 1206 - nn PF R

Series Designator
BVR = BVR Series
Automotive Grade
Model Size
1206 = 1206 Package
Max. RMS Voltage
04 = 4 V
11 = 11 V
14 = 14 V
17 = 17 V
20 = 20 V
25 = 25 V
30 = 30 V
35 = 35 V
40 = 40 V
50 = 50 V
60 = 60 V
RoHS Compliance
PF = Lead free
Packaging
R = Tape and reel packaging
(4,000 pcs. per 7-inch reel)

BOURNS®

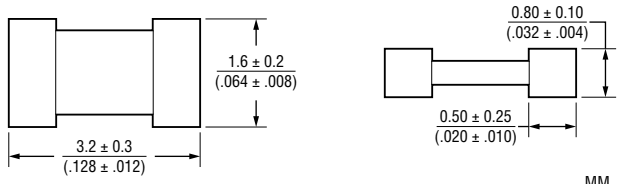
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WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

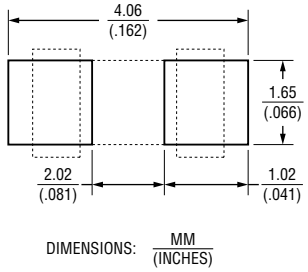
*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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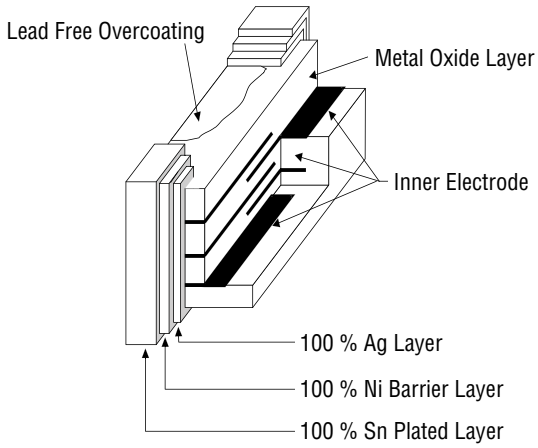
Product Dimensions



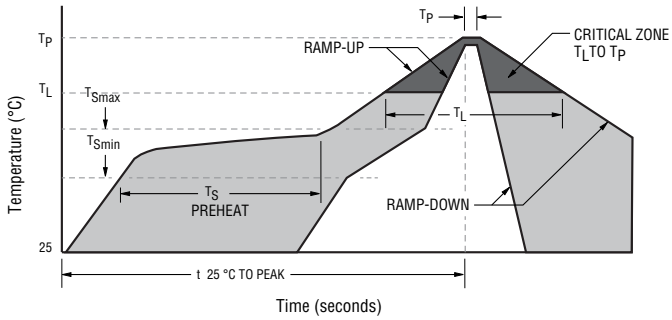
Recommended Pad Layout



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.

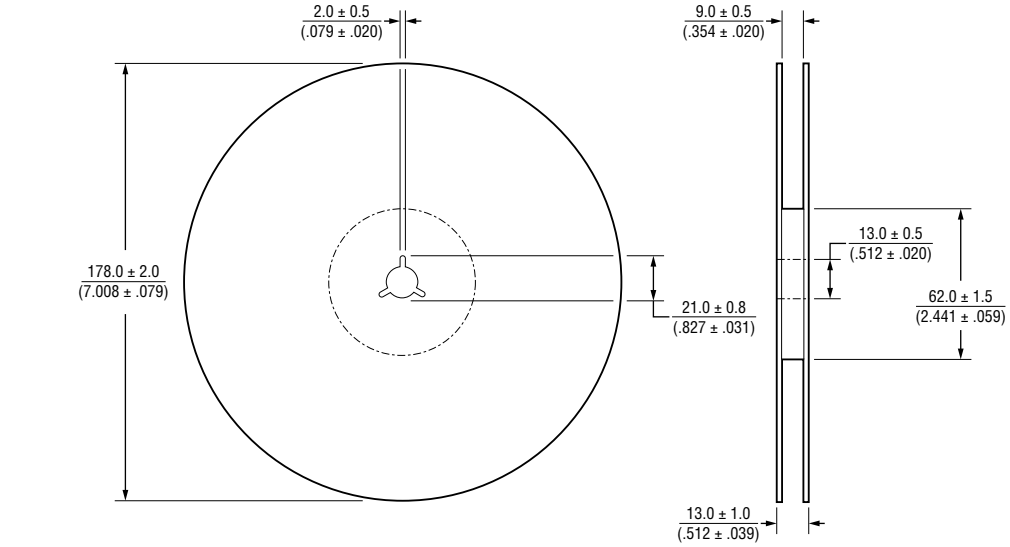
CAUTION:

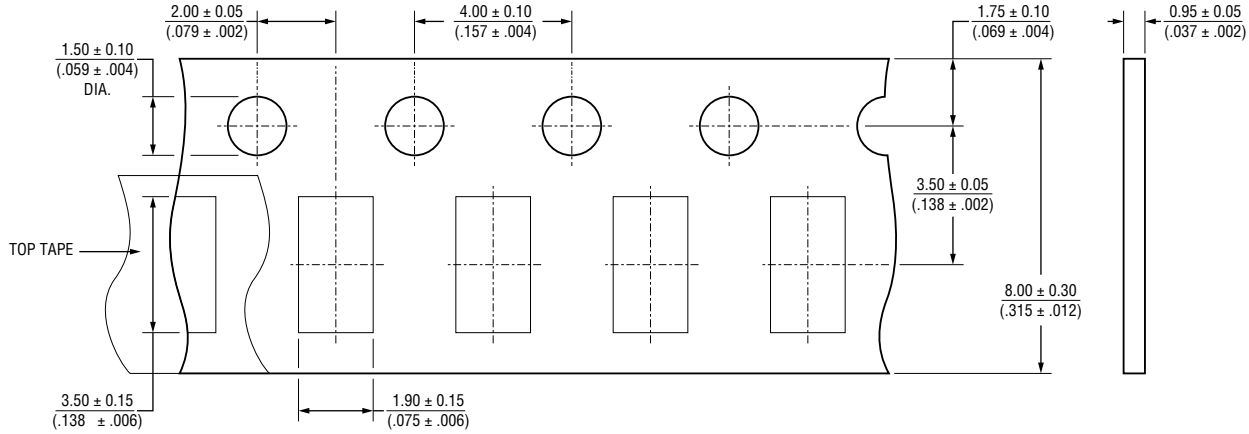
- This product can be damaged by rapid heating, cooling or localized heating.
- Heat shocks should be avoided. Preheating and gradual cooling recommended.
- Solder gun tip temperature should be kept below 280 °C and should not touch the device directly. Contact should be less than 3 seconds. A solder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

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Packaging Dimensions





USER DIRECTION OF FEED

QTY: 4,000 PCS. PER REEL

DIMENSIONS: MM / (INCHES)

REV. 09/24

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