

NEW PRODUCT BRIEF

Model BVRA Series AEC-Q200 Compliant, Automotive Grade Multilayered Varistors

INTRODUCTION

Bourns is pleased to announce the release of the Model BVRA Series Multilayered Varistors. These AEC-Q200 compliant, automotive grade low voltage multilayered varistors feature excellent transient energy absorption due to their enhanced energy volume distribution and power dissipation design. The capabilities of Bourns® BVRA Series Varistors are ideal for use in automotive circuits requiring effective surge protection.

The Model BVRA Series is available with working voltages from 5.5 V to 100 VDC and is offered in 0402, 0603, 0805, 1206, 1210 and 1812 package sizes, making them a superior protection solution for a wide range of integrated circuits and other components at the circuit board level.

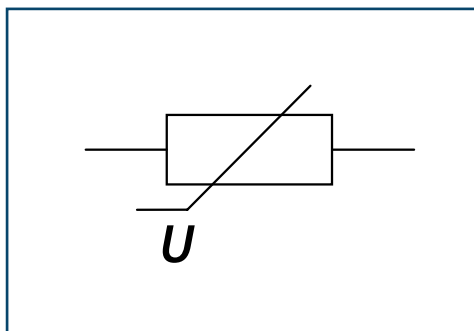
FEATURES

- AEC-Q200 compliant
- Meets IEC 61000-4-5 standard
- Compact SMD package
- Quick response time (<0.5 ns)
- High transient current capability
- Lead free
- 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

CIRCUIT DIAGRAM



MORE INFORMATION

- [High-energy MOVs](#)
- [High-current GDTs](#)
- [Power TVS Diodes](#)

BENEFITS

- **Effective Protection:** Meets IEC 61000-4-5 standards, offering robust defense against transient voltage events.
- **Rapid Response:** Swift <0.5 ns reaction time, ensuring prompt energy diversion during transient events.
- **Reliable Performance:** High reliability and stable leakage current for consistent circuit protection.
- **Optimized Design:** Compact SMD form factor and insulator overcoat help enhance efficiency and streamline integration and compliance.

HOW TO ORDER

BVRA xxxx - nn PF R

Series Designator _____
BVR = BVR Series

Automotive Grade _____

Model Size _____
0402 = 0402 Package
0603 = 0603 Package
0805 = 0805 Package
1206 = 1206 Package
1210 = 1210 Package
1812 = 1812 Package

Max. RMS Voltage _____
04 = 4 V 21 = 21 V
06 = 6 V 25 = 25 V
08 = 8 V 30 = 30 V
09 = 9 V 34 = 34 V
10 = 10 V 30 = 30 V
11 = 11 V 35 = 35 V
14 = 14 V 40 = 40 V
17 = 17 V 46 = 46 V
18 = 18 V 50 = 50 V
20 = 20 V 60 = 60 V
 75 = 75 V

RoHS Compliance _____
PF = Lead free

Packaging _____
R = Tape and reel packaging
(10,000 pcs. per 7-inch reel)

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

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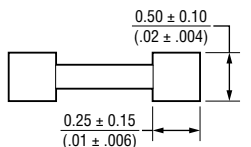
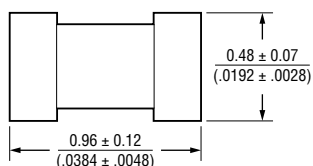
ELECTRICAL CHARACTERISTICS

Series	Size	V_{rms} (V)	V_{dc} (V)	I_{max} (A)	RoHS Compliant*	AEC-Q200 Compliant/ Automotive Grade
		< 10 μ A		@ 8/20 μ s		
BVRA0402 Series	0402	4 ~ 14	5.5 ~ 18	10 ~ 20	Yes	Yes
BVRA0603 Series	0603	4 ~ 30	5.5 ~ 38	20 ~ 30	Yes	Yes
BVRA0805 Series	0805	4 ~ 35	5.5 ~ 45	30 ~ 120	Yes	Yes
BVRA1206 Series	1206	4 ~ 60	5.5 ~ 85	100 ~ 200	Yes	Yes
BVRA1210 Series	1210	9 ~ 75	11 ~ 100	200 ~ 500	Yes	Yes
BVRA1812 Series	1812	10 ~ 75	14 ~ 100	400 ~ 800	Yes	Yes

For full characteristics, see data sheet

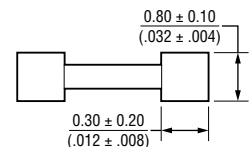
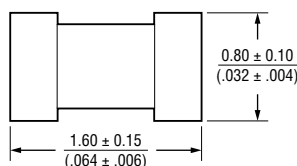
PRODUCT DIMENSIONS

BVRA0402 Series



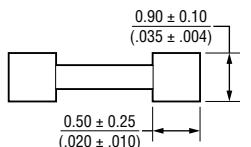
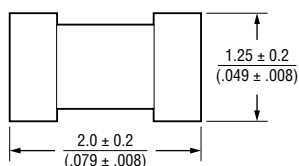
DIMENSIONS: $\frac{MM}{(INCHES)}$

BVRA0603 Series



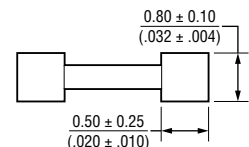
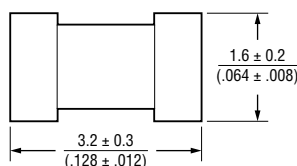
DIMENSIONS: $\frac{MM}{(INCHES)}$

BVRA0805 Series



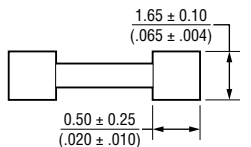
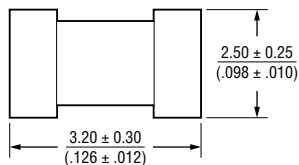
DIMENSIONS: $\frac{MM}{(INCHES)}$

BVRA1206 Series



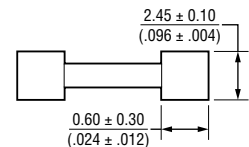
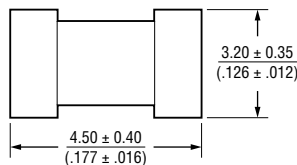
DIMENSIONS: $\frac{MM}{(INCHES)}$

BVRA1210 Series



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

BVRA1812 Series



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

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