

Features

- High current up to 10 A
- RoHS compliant*

Applications

- DC/DC converters
- Power supplies

LPV Series Radial Power Inductors

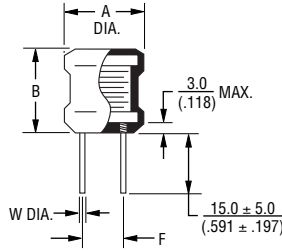
General Specifications

Temperature Rise
45 °C max. at rated current
 Operating Temperature...-40 °C to +85 °C
 Storage Temperature ..-40 °C to +105 °C

Materials

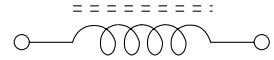
Core MaterialFerrite DR core
 WireEnameled copper wire
 TerminalCu/Sn
 Tube.....Shrinkable tube 125 °C, 600 V

Product Dimensions



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

Electrical Schematic



Electrical Characteristics and Product Dimensions

| BOURNS Part No. | Inductance (μH) 1KHz | RDC (Ω) max. | IDC (A) max. | Dimensions | | | |
|-----------------|--------------------------------------|--------------------------|-----------------|-----------------------|-----------------------|--|---------------------------------------|
| | | | | A max. | B max. | F | W dia. |
| LPV1620-100ML | 10 \pm 20 % | 0.024 | 5.0 | $\frac{16.0}{(.630)}$ | $\frac{20.0}{(.787)}$ | $\frac{8.0 \pm 1.5}{(.315 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV1620-250KL | 25 \pm 10 % | 0.040 | 4.0 | $\frac{16.0}{(.630)}$ | $\frac{20.0}{(.787)}$ | $\frac{8.0 \pm 1.5}{(.315 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV1620-500KL | 50 \pm 10 % | 0.060 | 3.0 | $\frac{16.0}{(.630)}$ | $\frac{20.0}{(.787)}$ | $\frac{8.0 \pm 1.5}{(.315 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV1620-101KL | 100 \pm 10 % | 0.090 | 2.0 | $\frac{16.0}{(.630)}$ | $\frac{20.0}{(.787)}$ | $\frac{8.0 \pm 1.5}{(.315 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV1620--251KL | 250 \pm 10 % | 0.180 | 1.5 | $\frac{16.0}{(.630)}$ | $\frac{20.0}{(.787)}$ | $\frac{8.0 \pm 1.5}{(.315 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV1620-501KL | 500 \pm 10 % | 0.400 | 1.0 | $\frac{16.0}{(.630)}$ | $\frac{20.0}{(.787)}$ | $\frac{8.0 \pm 1.5}{(.315 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV1620-102KL | 1000 \pm 10 % | 0.800 | 0.7 | $\frac{16.0}{(.630)}$ | $\frac{20.0}{(.787)}$ | $\frac{8.0 \pm 1.5}{(.315 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV1823-100M | 10 \pm 20 % | 0.009 | 8.0 | $\frac{18.0}{(.709)}$ | $\frac{23.0}{(.906)}$ | $\frac{14.0 \pm 1.5}{(.551 \pm .059)}$ | $\frac{1.2 \pm 0.1}{(.047 \pm .004)}$ |
| LPV1823-250KL | 25 \pm 10 % | 0.022 | 6.0 | $\frac{18.0}{(.709)}$ | $\frac{23.0}{(.906)}$ | $\frac{14.0 \pm 1.5}{(.551 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV1823-500KL | 50 \pm 10 % | 0.036 | 4.0 | $\frac{18.0}{(.709)}$ | $\frac{23.0}{(.906)}$ | $\frac{14.0 \pm 1.5}{(.551 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV1823-101KL | 100 \pm 10 % | 0.090 | 3.0 | $\frac{18.0}{(.709)}$ | $\frac{23.0}{(.906)}$ | $\frac{9.0 \pm 1.5}{(.354 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV1823-251KL | 250 \pm 10 % | 0.150 | 2.0 | $\frac{18.0}{(.709)}$ | $\frac{23.0}{(.906)}$ | $\frac{9.0 \pm 1.5}{(.354 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV1823-501KL | 500 \pm 10 % | 0.300 | 1.2 | $\frac{18.0}{(.709)}$ | $\frac{23.0}{(.906)}$ | $\frac{9.0 \pm 1.5}{(.354 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV1823-102KL | 1000 \pm 10 % | 0.600 | 1.0 | $\frac{18.0}{(.709)}$ | $\frac{23.0}{(.906)}$ | $\frac{9.0 \pm 1.5}{(.354 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV2023-100M | 10 \pm 20 % | 0.008 | 10.0 | $\frac{20.0}{(.787)}$ | $\frac{23.0}{(.906)}$ | $\frac{15.5 \pm 1.5}{(.610 \pm .059)}$ | $\frac{1.3 \pm 0.1}{(.051 \pm .004)}$ |
| LPV2023-500KL | 50 \pm 10 % | 0.032 | 5.0 | $\frac{20.0}{(.787)}$ | $\frac{23.0}{(.906)}$ | $\frac{15.5 \pm 1.5}{(.610 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV2023-101KL | 100 \pm 10 % | 0.060 | 4.0 | $\frac{20.0}{(.787)}$ | $\frac{23.0}{(.906)}$ | $\frac{15.5 \pm 1.5}{(.610 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV2023-251KL | 250 \pm 10 % | 0.140 | 2.5 | $\frac{20.0}{(.787)}$ | $\frac{23.0}{(.906)}$ | $\frac{12.5 \pm 1.5}{(.492 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV2023-501KL | 500 \pm 10 % | 0.280 | 1.5 | $\frac{20.0}{(.787)}$ | $\frac{23.0}{(.906)}$ | $\frac{12.5 \pm 1.5}{(.492 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV2023-102KL | 1000 \pm 10 % | 0.550 | 1.2 | $\frac{20.0}{(.787)}$ | $\frac{23.0}{(.906)}$ | $\frac{12.5 \pm 1.5}{(.492 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |
| LPV2023-202KL | 2000 \pm 10 % | 1.200 | 0.8 | $\frac{20.0}{(.787)}$ | $\frac{23.0}{(.906)}$ | $\frac{12.5 \pm 1.5}{(.492 \pm .059)}$ | $\frac{1.0 \pm 0.1}{(.039 \pm .004)}$ |

REV. 09/09

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.