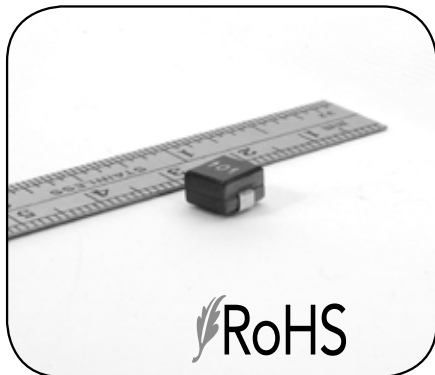


# LP02-2 Series VRM Inductor



## Features

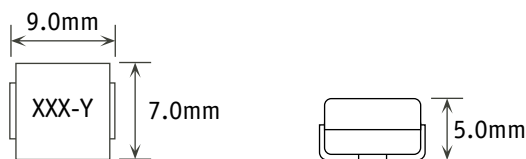
- Design verified by leading IC manufacturers
- High saturation current of 65A
- Designed for frequencies up to 1MHz
- Suitable for pick and place applications
- Tighter DCR tolerances available. Contact ICE for additional details

## Applications

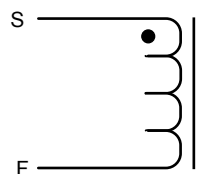
- Voltage Regulator Modules (VRMs)
- High Frequency, High Current Switching Power Supplies
- Synchronous Buck DC/DC Converters

**Packaging** Reel Diameter: 13", Reel Width: 16mm, Pieces Per Reel: 1,000

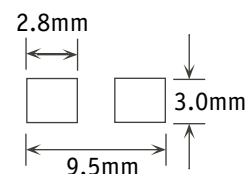
## Mechanical



## Schematic



## Recommended PCB Layout



## Electrical Specifications

| Part Number | Inductance <sup>1</sup><br>(nH, ±15%) | DCR ± 10%<br>(mΩ) | I <sub>sat</sub> <sup>2</sup><br>(A) | I <sub>dc</sub> <sup>3</sup><br>(A) |
|-------------|---------------------------------------|-------------------|--------------------------------------|-------------------------------------|
| LP02-101-2  | 100                                   | 0.30              | 65                                   | 48                                  |
| LP02-151-2  | 155                                   | 0.30              | 42                                   | 48                                  |
| LP02-181-2  | 180                                   | 0.30              | 33                                   | 48                                  |
| LP02-201-2  | 210                                   | 0.30              | 25                                   | 48                                  |
| LP02-231-2  | 235                                   | 0.30              | 24                                   | 48                                  |
| LP02-301-2  | 310                                   | 0.30              | 16                                   | 48                                  |

1. Tested @ 1MHz, 0.1Vrms.
2. Inductance drops 15% at rated I<sub>sat</sub>.
3. DC current that causes a 40°C temperature rise. PCB layout, trace thickness and width, airflow and proximity to other devices will effect the temperature rise.
4. Electrical specifications at 25°C.
5. Operating temperature range: -40°C to +130°C.
6. Meets UL 94V-0.
7. Test equipment used includes HP4194A Impedance Analyzer, GPR-1210 HDD DC Power Supply, and CH502A Ohmmeter.