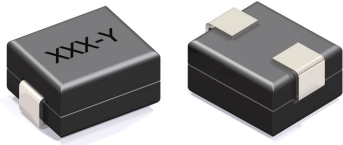


# LP02-2 Series

High Current, Low Inductance, One Turn Inductors



- Height: 5.0 mm
- Footprint: 9.0 mm x 7.0 mm
- $I_{SAT}$  Current Rating: Up to 65A
- Frequency Range: Up to 1MHz
- Suitable for Pick & Place Applications
- Design Verified by Leading IC Manufacturers

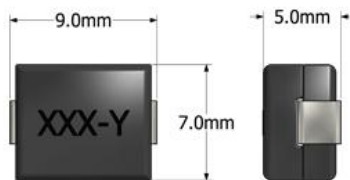
## APPLICATIONS

Voltage Regulation Modules  
High Frequency, High Current  
Switching Power Supplies  
Synchronous Buck DC/DC  
Converters

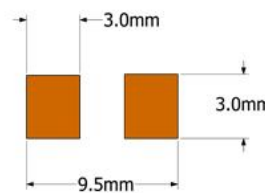
## PACKAGING

Reel Diameter: 13"  
Reel Width: 16 mm  
Pieces/Reel: 1000

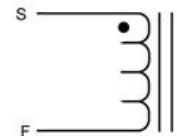
### Mechanical Drawing



### Recommended PCB Layout



### Schematic



### Electrical Specifications @ 25°C - Operating Temperature Range<sup>1</sup>: -40°C to +130°C

Part Number	Inductance, $L_S$ <sup>2</sup> (nH, $\pm 15\%$ )	DCR <sup>3</sup> (m $\Omega$ , $\pm 10\%$ )	$I_{SAT}$ <sup>4</sup> (A <sub>DC</sub> )	$I_{DC}$ <sup>5</sup> (A <sub>DC</sub> )
LP02-101-2	100	0.3	65	48
LP02-151-2	155	0.3	42	48
LP02-181-2	180	0.3	33	48
LP02-201-2	210	0.3	25	48
LP02-231-2	235	0.3	24	48
LP02-301-2	310	0.3	16	48

- Operating Temp. Range:** The combination of ambient temperature and temperature rise.
- Inductance:** Tested at 1MHz, 0.1 V<sub>RMS</sub>
- Tighter DCR tolerances available.** Contact ICE for more details.
- $I_{SAT}$ : DC Current through the winding to cause a 15% (Nom) drop in inductance.

- $I_{DC}$ : DC Current through the winding to cause 40°C temperature rise at 25°C ambient. PCB layout, trace thickness and width, airflow and proximity to other devices will affect the temperature rise.



Specifications subject to change without prior notice.

TEL.: 800-729-2099

www.icecomponents.com

April 29 2022 - LP02-2 Series