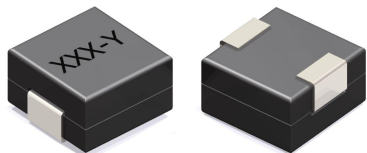


LP02-5 Series

High Current, Low Inductance, One Turn Inductors



- Height: 8.0 mm
- Footprint: 13.5 mm x 13.0 mm
- I_{SAT} Current Rating: Up to 100A
- Frequency Range: Up to 1MHz
- Suitable for Pick & Place Applications
- Design Verified by Leading IC Manufacturers

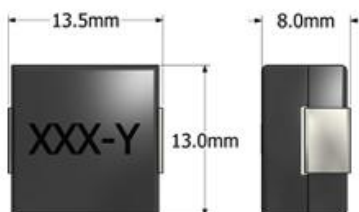
APPLICATIONS

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

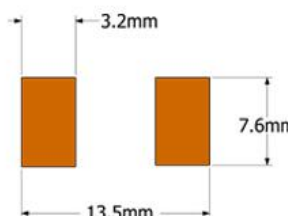
PACKAGING

Reel Diameter: 13"
Reel Width: 24 mm
Pieces/Reel: 400

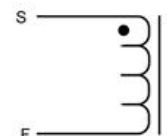
Mechanical Drawing



Recommended PCB Layout



Schematic



Electrical Specifications @ 25°C - Operating Temperature Range¹: -40°C to +130°C

Part Number	Inductance, L_S ² (nH, $\pm 15\%$)	DCR ³ (m Ω , $\pm 10\%$)	I_{SAT} ⁴ (A _{DC})	I_{DC} ⁵ (A _{DC})
LP02-121-5	120	0.20	100	50
LP02-191-5	190	0.20	77	50
LP02-241-5	240	0.20	60	50
LP02-281-5	280	0.20	50	50
LP02-321-5	320	0.20	42	50
LP02-381-5	380	0.20	35	50
LP02-431-5	430	0.20	30	50
LP02-511-5	510	0.20	24	50
LP02-571-5	570	0.20	20	50
LP02-771-5	770	0.20	12	50

- Operating Temp. Range:** The combination of ambient temperature and temperature rise.
- Inductance:** Tested at 1MHz, 0.1 V_{RMS}
- 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 - LP02-5 Series