

LP07 Series

SMT High Current Low Resistance Inductors



- Height: 6.5 mm (Max)
- Footprint: 15.3 mm x 13.0 mm (Max)
- I_{SAT} Current Rating: Up to 85A
- Frequency Range: Up to 1MHz
- Low Cost Design
- Low DCR
- Suitable for Pick & Place Applications

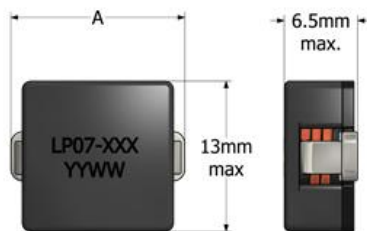
APPLICATIONS

AC/DC and DC/DC Converters
Servers/Workstations
Telecom Switches
Voltage Regulation Modules

PACKAGING

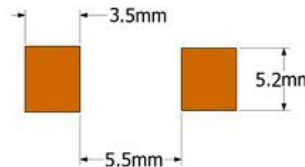
Reel Diameter: 13"
Reel Width: 24 mm
Pieces/Reel: 350

Mechanical Drawing

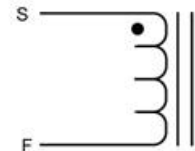


A = LP07-181: **15.3mm max.**
LP07-451 & 801: **15.0mm max.**
LP07-142 to 392: **14.5mm max.**

Recommended PCB Layout



Schematic



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

Part Number	Inductance, L_S ² (μH , $\pm 20\%$)	DCR ($m\Omega$, Max.)	I_{SAT} ³ (A_{DC})	I_{DC} ⁴ (A_{DC})
LP07-181	0.18	0.45	85	45
LP07-451	0.45	0.90	53	40
LP07-801	0.80	1.40	36	31
LP07-142	1.40	2.20	28	26
LP07-202	2.00	3.00	24	21
LP07-282	2.80	4.30	20	17
LP07-392	3.90	5.25	16	16

- Operating Temp. Range:** The combination of ambient temperature and temperature rise.
- Inductance:** Tested at 100 kHz, 0.1 V_{RMS}
- I_{SAT} :** DC Current through the winding to cause a 20% (Nom) drop in inductance at 25°C ambient.
- 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.

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