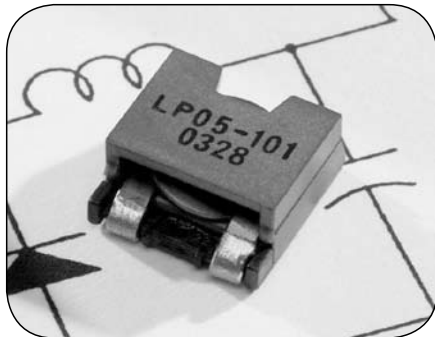


LP05 Series SMT High Current Inductors



Features

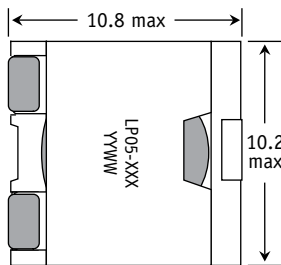
- High saturation current
- Suitable for pick and place applications
- Flat wire reduces ACR
- Suitable for frequencies to 1 MHz

Applications

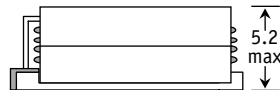
- Synchronous Buck Converters
- VRM Modules
- Point of Load DC/DC Converters
- Output Chokes

Packaging Reel diameter: 13", Reel width: 24 mm, Pieces/reel: 700

Mechanical

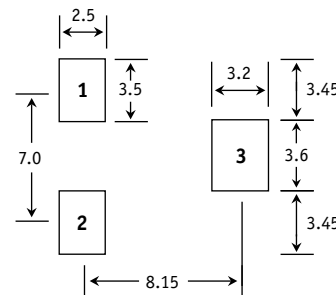


Top View



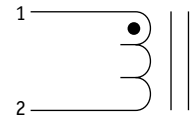
Side View

Recommended PCB Layout



Top View

Schematic



units: mm

Electrical Specifications

| Part Number | Inductance ¹ (nH +/- 10%) | DCR (mΩ typ.) | I _{dc} ⁵ | I _{sat} ⁶ |
|-----------------------|---|------------------|------------------------------|-------------------------------|
| LP05-101 ⁸ | 100 | 0.56 | 40 | 55 |
| LP05-181 | 180 | 1.3 | 28 | 45 |
| LP05-221 | 220 | 1.3 | 28 | 40 |
| LP05-271 | 270 | 1.3 | 28 | 35 |
| LP05-331 | 330 | 1.3 | 28 | 30 |
| LP05-391 | 390 | 2.1 | 22 | 30 |
| LP05-471 | 470 | 2.1 | 22 | 25 |
| LP05-561 | 560 | 3.3 | 18 | 25 |
| LP05-681 | 680 | 3.3 | 18 | 20 |
| LP05-821 | 820 | 4.5 | 14 | 20 |
| LP05-102 | 1000 | 4.5 | 14 | 17 |
| LP05-132 | 1300 | 4.5 | 14 | 12 |

1. Tested at 1 MHz, 0.1 V_{rms}.
2. Electrical specifications at 25°C.
3. Operating range: -40°C to +155°C.
4. Meets UL 94V-0.
5. I_{dc} is DC current required to produce a temperature rise of 40°C.
6. I_{sat} is the DC current required to reduce the nominal inductance by 15%.
7. For Lead Free components, please add "LF" as suffix.
8. Height = 5.2 mm max.
Length = 10.8 mm max.

