SMT Power Inductors

Unshielded Drum Core - PF0382NL Series







- 🕐 Height: 11.3mm Max
- *Footprint:* 13.0mm x 9.4mm Max
- *Current Rating:* up to 4.9A
- Inductance Range: 10H to 1000H
- *P* RoHS compliant version available on request

| Electrical Specifications @ 25°C – Operating Temperature –40°C to +125°C ⁷ | | | | | | | | | | |
|---|---|----------------------------|------------------------|---|--|--|--|--|--|--|
| Part ^{5,6} Number | Inductance ¹ @ Irated (µH TYP) | Irated ² (A) | dcr (mΩ Max) | Inductance @ 0A _{DC} (μH ±20%) | Saturation ³ Current Isar (A) | Heating ⁴ Current loc (A) | | | | |
| PF0382.103NL * | 9 | 4.90 | 24 | 10 | 8.30 | 4.90 | | | | |
| PF0382.153NL * | 14 | 4.20 | 31 | 15 | 7.10 | 4.20 | | | | |
| PF0382.223NL | 20 | 3.50 | 47 | 22 | 5.60 | 3.50 | | | | |
| PF0382.333NL * | 30 | 3.10 | 65 | 33 | 4.30 | 3.10 | | | | |
| PF0382.473NL * | 42 | 2.70 | 90 | 47 | 3.80 | 2.70 | | | | |
| PF0382.683NL | 61 | 1.90 | 130 | 68 | 3.10 | 1.90 | | | | |
| PF0382.104NL * | 90 | 1.50 | 200 | 100 | 2.60 | 1.50 | | | | |
| PF0382.154NL * | 140 | 1.20 | 280 | 150 | 2.10 | 1.20 | | | | |
| PF0382.224NL | 200 | 1.10 | 360 | 220 | 1.70 | 1.10 | | | | |
| PF0382.334NL * | 297 | 0.80 | 580 | 330 | 1.35 | 0.80 | | | | |
| PF0382.474NL * | 423 | 0.60 | 860 | 470 | 1.15 | 0.60 | | | | |
| PF0382.684NL * | 612 | 0.50 | 1200 | 680 | 1.05 | 0.50 | | | | |
| PF0382.105NL * | 900 | 0.20 | 2000 | 1000 | 0.85 | 0.20 | | | | |

Notes:

- 1. Inductance at Irated is a typical inductance value measured when the inductor is subjected to the rated current.
- 2. The rated current as listed is either the saturation current at 25°C or the heating current, depending on which value is lower.
- 3. The saturation current lsat is the current which causes the inductance to drop by 10% (typical) at an ambient temperature of 25°C. This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effects) to the component.
- 4. The heating current IDC is the DC current, which causes the temperature rise of the part to increase by the approximately 40°C. This current is determined by mounting the component on a typical application PCB and applying the current to the device

for 30 minutes.

- Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PF0382.103NL becomes PF0382.103NLT). Pulse complies to industry standard tape and reel specification EIA481.
- 6. The "NL" suffix indicates an RoHS-compliant part number. Non-NL suffixed parts are not necessarily RoHS compliant, but are electrically and mechanically equivalent to NL versions. If a part number does not have the "NL" suffix, but an RoHS compliant version is required, please contact Pulse for availability.
- 7. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- * Contact Pulse for availability



1

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2

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