

SMT POWER INDUCTORS

Unshielded Drum Core - PB2020NL Series



-  **Height:** 10.2mm Max
-  **Footprint:** 23.9mm x 20.8mm Max
-  **Current Rating:** up to 30A
-  **Inductance Range:** 0.68μH to 33μH

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

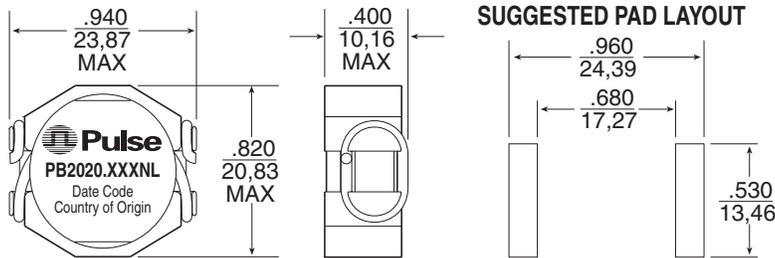
| Part Number ^{6,7} | Inductance @ 0 A _{DC} (μH ±20%) | Inductance @ I _{rated} ² (μH TYP) | I _{rated} ³ (A _{DC}) | DCR (mΩ) | | Saturation ⁴ Current @ 25°C (A _{DC}) | Heating ⁵ Current (A _{DC}) |
|----------------------------|--|---|--|----------|-------|---|---|
| | | | | (TYP) | (MAX) | | |
| PB2020.681NL | 0.68 | 0.62 | 30.0 | 1.60 | 1.80 | 70 | 30.0 |
| PB2020.102NL | 1.20 | 1.20 | 23.7 | 2.00 | 2.20 | 55 | 23.7 |
| PB2020.222NL | 2.20 | 1.90 | 21.8 | 2.60 | 2.80 | 40 | 21.8 |
| PB2020.332NL | 3.30 | 3.40 | 18.3 | 3.60 | 3.90 | 35 | 18.3 |
| PB2020.472NL | 4.70 | 4.40 | 16.8 | 4.20 | 4.50 | 28 | 16.8 |
| PB2020.682NL | 6.80 | 5.90 | 13.6 | 6.10 | 6.50 | 25 | 13.6 |
| PB2020.103NL | 10.00 | 8.40 | 12.6 | 7.40 | 7.80 | 20 | 12.6 |
| PB2020.153NL | 15.00 | 14.00 | 9.7 | 12.00 | 13.00 | 18 | 9.7 |
| PB2020.223NL | 22.00 | 19.00 | 8.1 | 17.00 | 20.00 | 13 | 8.1 |
| PB2020.333NL | 33.00 | 31.00 | 6.5 | 26.00 | 29.00 | 10 | 6.5 |

- NOTES:**
- The temperature of the component (ambient plus temperature rise) must be within the specified operating temperature range.
 - Inductance at I_{rated} is typical inductance value for component taken at rated current.
 - The rated current listed is the lower of saturation current @ 25°C or heating current.
 - The saturation current, I_{sat}, is the current at which the component inductance drops 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.
 - The heating current, I_{hc}, is the DC current required to raise the component

- temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
- Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PB2020.102NL becomes PB2020.102NLT). Pulse complies to industry standard tape and reel specification EIA481.
- 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.

Mechanical

Schematic



Weight 9.5 grams
Tape & Reel 100/reel
Tray 20/tray

Dimensions: Inches
mm
Unless otherwise specified, all tolerances are ± .010 / 0.25

