





SMT POWER INDUCTORS

PB2020 Series



NEW!

-  Current range: 6.6 A to 30 A (up to 70 A saturation)
-  Footprint: .94" x .82" x .40" MAX
-  Typical energy storage density: 1600 $\mu\text{J}/\text{in}^3$
-  Ideal for high current, low voltage DC/DC converter applications

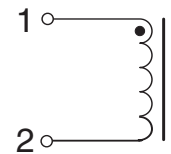
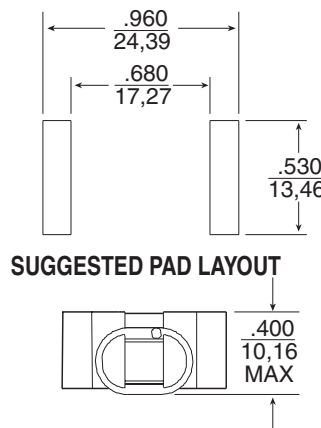
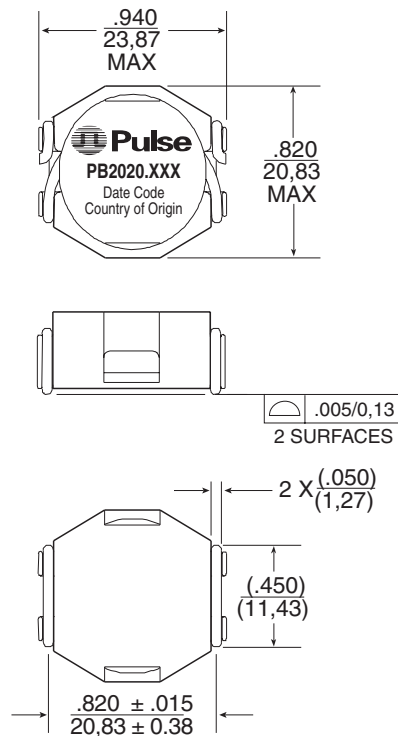
Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C

| Part Number | Inductance @ Irated (μH MIN) | Irated ¹ (ADC) | DCR (mΩ) | | Inductance @ 0 A _{DC} (μH ±15%) | Saturation Current ² @ 25°C (ADC) | Heating ³ Current @ 40°C (ADC) |
|-------------|------------------------------|---------------------------|----------|-------|--|--|---|
| | | | (TYP) | (MAX) | | | |
| PB2020.681 | 0.65 | 30.0 | 1.62 | 1.80 | 0.65 | 70 | 30.0 |
| PB2020.102 | 0.85 | 23.7 | 1.98 | 2.20 | 0.85 | 55 | 23.7 |
| PB2020.222 | 1.83 | 21.8 | 2.34 | 2.60 | 1.83 | 40 | 21.8 |
| PB2020.332 | 3.00 | 18.3 | 3.33 | 3.70 | 3.00 | 35 | 18.3 |
| PB2020.472 | 4.00 | 16.8 | 3.96 | 4.40 | 4.00 | 28 | 16.8 |
| PB2020.682 | 5.78 | 13.6 | 6.03 | 6.70 | 5.78 | 25 | 13.6 |
| PB2020.103 | 8.30 | 12.6 | 7.02 | 7.80 | 8.30 | 20 | 12.6 |
| PB2020.153 | 13.00 | 9.7 | 11.70 | 13.00 | 13.00 | 18 | 9.7 |
| PB2020.223 | 18.70 | 8.1 | 17.10 | 19.00 | 18.70 | 13 | 8.1 |
| PB2020.333 | 29.00 | 6.5 | 26.10 | 29.00 | 29.00 | 10 | 6.5 |

Mechanical

Schematic

PB2020.XXX



Weight9.5 grams
 Tape & Reel100/reel
 Tray20/tray

Dimensions: $\frac{\text{Inches}}{\text{mm}}$
 Unless otherwise specified,
 all tolerances are $\pm \frac{.010}{0.25}$

SMT POWER INDUCTORS

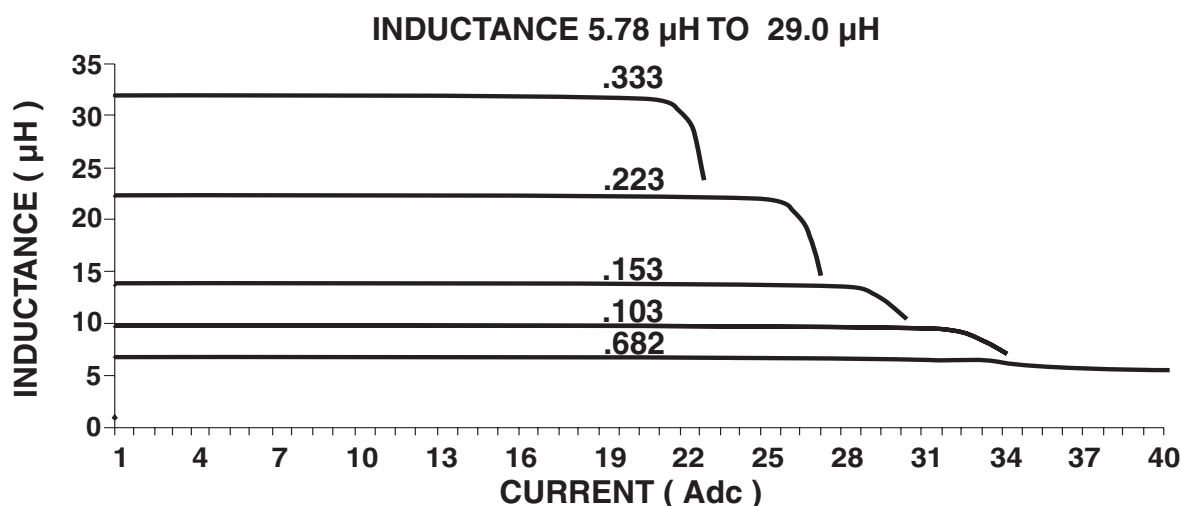
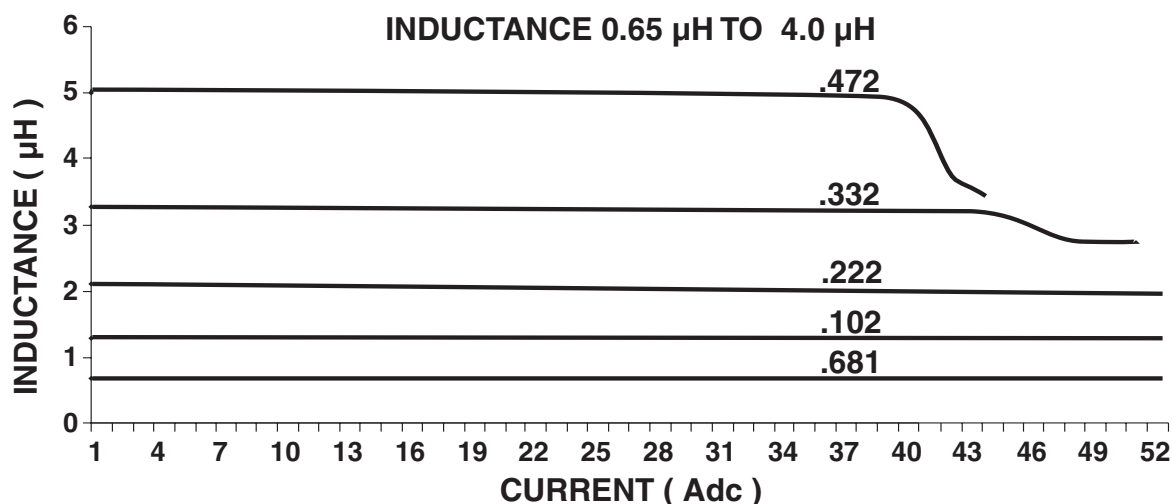
PB2020 Series



Notes from Tables

1. The rated current as listed is either the saturation current or the heating current depending on which value is lower.
2. The saturation current is the current which causes the inductance to drop by 10% at the stated 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.
3. The heating current is the dc current which causes the temperature of the part to increase by approximately 40°C. This current is determined by mounting the component on a PCB with .25" wide, 3 oz. equivalent copper traces, and applying the current to the device for 30 minutes.

TYPICAL INDUCTANCE vs. DC BIAS



For More Information :

| UNITED STATES (Worldwide) | UNITED KINGDOM (Northern Europe) | FRANCE (Southern Europe) | SINGAPORE (Southern Asia) | TAIWAN, R.O.C. (Northern Asia) | HONG KONG (China/Hong Kong) | DISTRIBUTOR |
|---|--|---|---|---|---|-------------|
| 12220 World Trade Drive San Diego, CA 92128 U.S.A. http://www.pulseeng.com TEL: 858 674 8100 FAX: 858 674 8262 | 1 & 2 Huxley Road The Surrey Research Park Guildford, Surrey GU2 5RE United Kingdom TEL: 44 1483 401700 FAX: 44 1483 401701 | Zone Industrielle F-39270 Orgelet France TEL: 33 3 84 35 04 04 FAX: 33 3 84 25 46 41 | 150 Kampong Ampat #07-01/02 KA Centre Singapore 368324 TEL: 65 287 8998 FAX: 65 280 0080 | 3F-4, No. 81, Sec. 1 HsinTai Wu Road Hsi-Chih, Taipei Hsien Taiwan, R.O.C. Tel: 886 2 2698 0228 FAX: 886 2 2698 0948 | 19/F, China United Plaza 1008 Tai Nan West Street Cheung Sha Wan, Kowloon Hong Kong, China Tel: 852 2788 6588 FAX: 852 2776 1055 | |

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners.