# SMT Power Inductors

*Power Beads - PA3288.XXXHL Series*

Pulse
a YAGEO company



- **Current Rating:** *Over 70Apk*
- **Inductance Range:** *150nH to 300nH*
- **Height:** *8.0mm Max*
- **Footprint:** *9.6mm x 6.4mm Max*
- *Halogen Free*

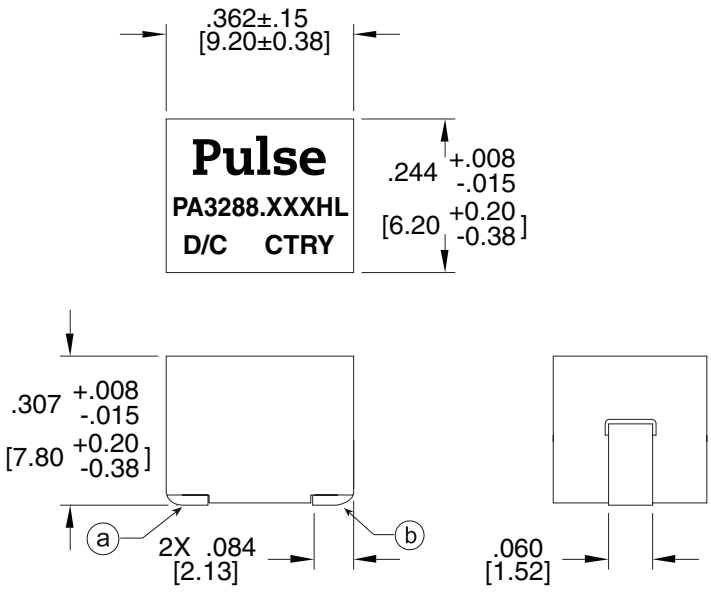
**Electrical Specifications @ 25°C — Operating Temperature - 40°C to +130°C [7]**

| Part Number | Inductance [1] @ 0ADC (+/- 10%) | Inductance [2] @Irated (nH TYP) | Irated [3] (ADC) | DCR [4] (mΩ nominal) | Saturation Current [5] | | | Heating Current [6] (A TYP) |
|---|---|---|---|---|---|---|---|---|
| | | | | | 25°C | 100°C | 125°C | |
| PA3288.151HL | 150 | 142 | 57.5 | 0.29 +/- 5% | 70+ | 57.5 | 54 | 64 |
| PA3288.221HL | 220 | 216 | 35 | | 45 | 35 | 32.5 | 64 |
| PA3288.281HL | 280 | 264 | 27 | | 36.5 | 27 | 25.5 | 64 |
| PA3288.301HL | 300 | 276 | 25.5 | | 34 | 25.5 | 24 | 64 |

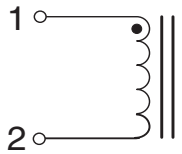
**NOTES:**

1. Inductance measured at 100kHz, 100mVrms.
2. Inductance at Irated is the value of the inductance at 25°C at the listed rated current.
3. The rated current as listed is either the saturation current (25°C or 100°C) or the heating current depending on which value is lower.
4. The nominal DCR is measured from point ⓐ to point ⓑ, as shown below on the mechanical drawing.
5. The saturation current is the typical current which causes the inductance to drop by 20% at the stated ambient temperatures (25°C, 100°C and 125°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.
6. The heating current is the DC current which causes the part temperature to increase by approximately 40°C when used in a typical application.
7. In high volt*time applications, additional heating in the component can occur due to core losses in the inductor which may neccessitate derating the current in order to limit the temperature rise of the component. To determine the approximate total losses (or temperature rise) for a given application, the coreless and temperature rise curves can be used.
8. Optional Tape & Reel packaging can be ordered by adding a "**T**" suffix to the part number (i.e. PA3288.151HL becomes PA3288.151HL**T**).
   Pulse complies to industry standard tape and reel specification EIA481. The tape and reel for this product has a width (W=24mm), pitch (Po=12.0mm) and depth (Ko=8.5mm).
9. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

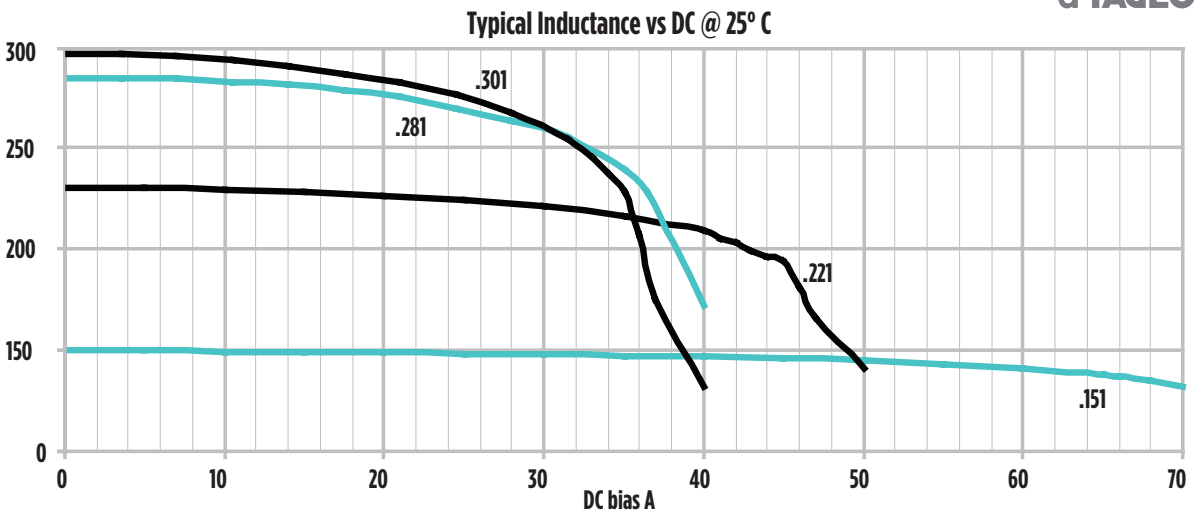
## Mechanical

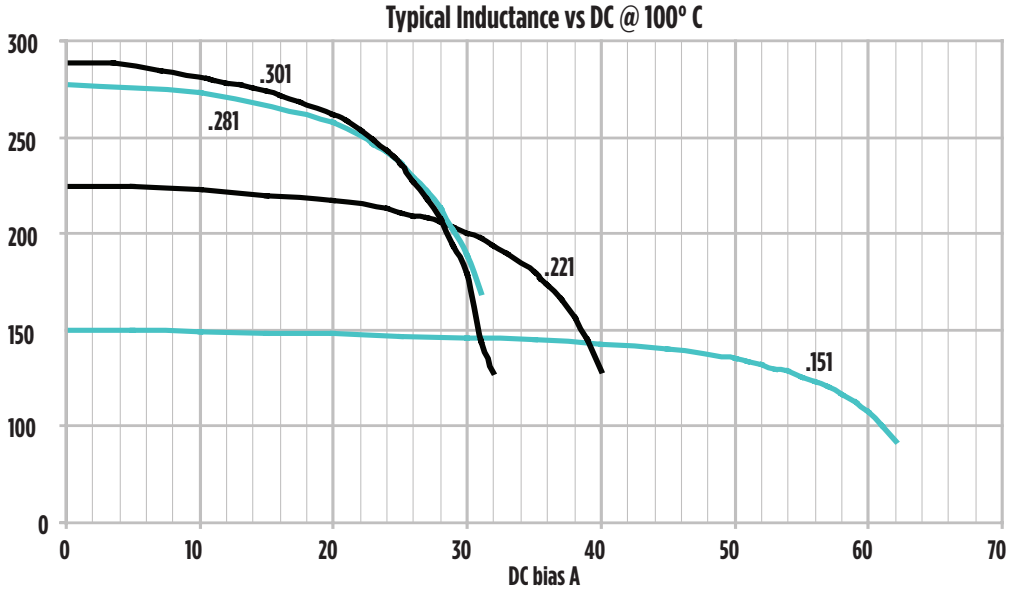


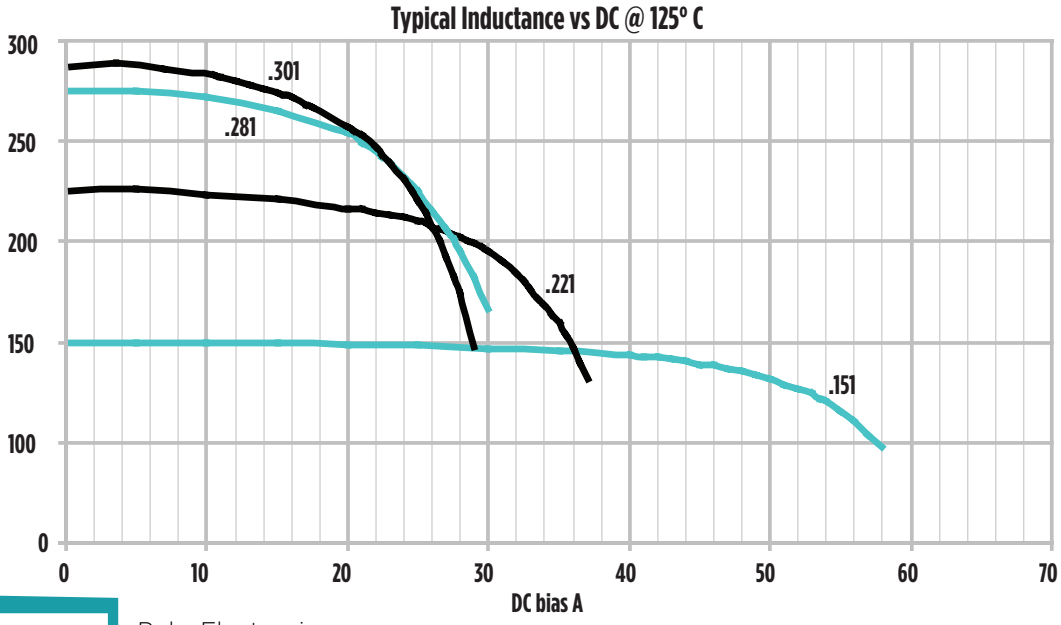

## Schematic

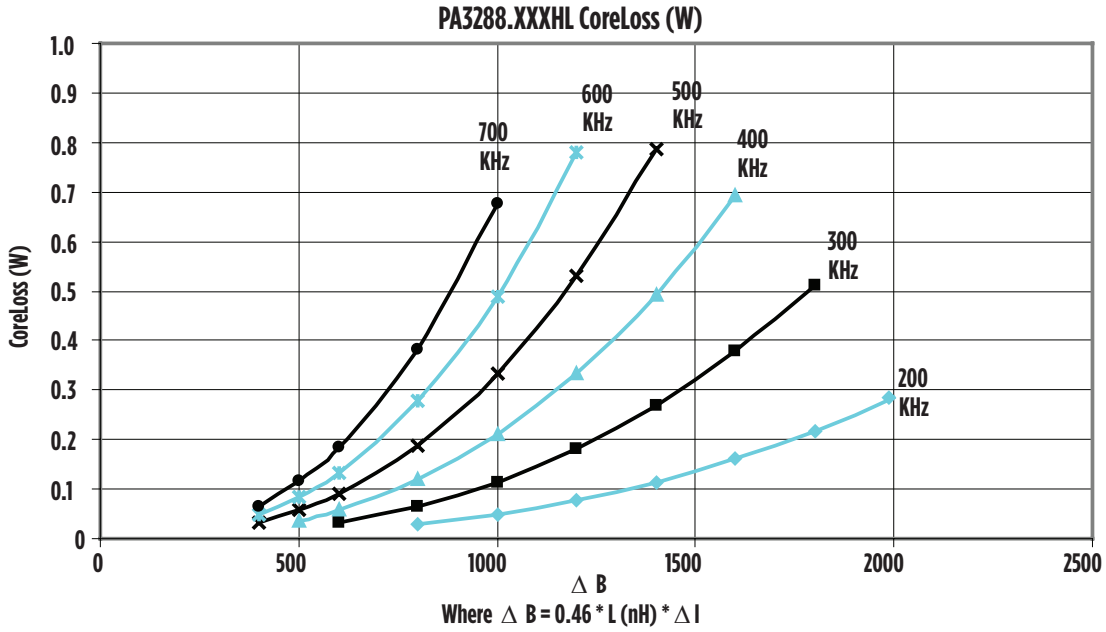


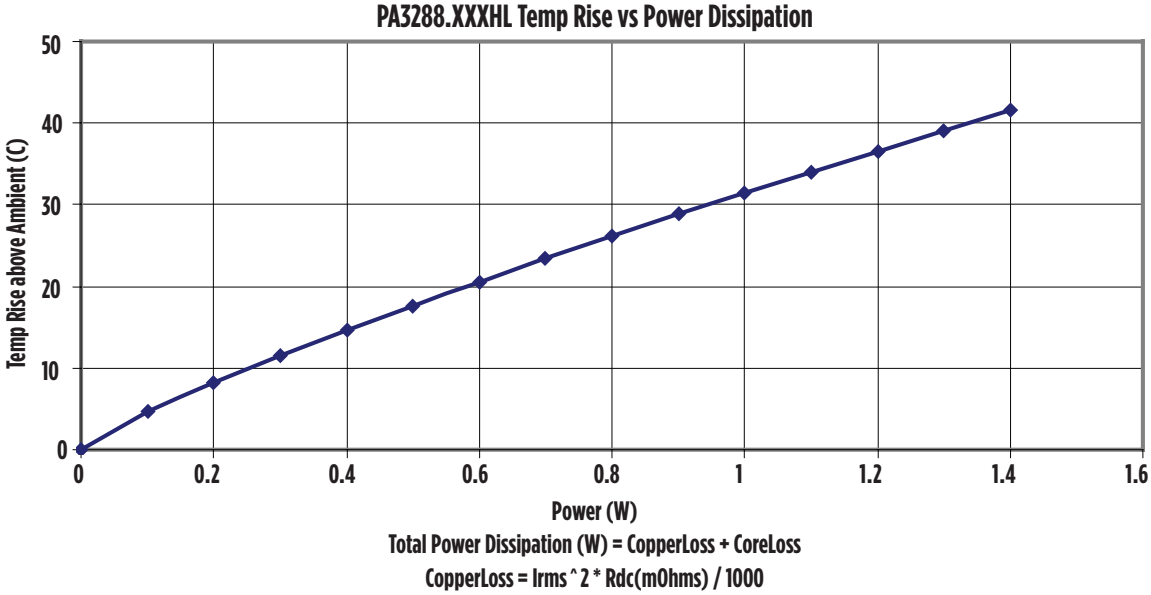

**Weight** .....2.4 grams
**Tape & Reel** .....560/reel
**Dimensions:** Inches / mm
Unless otherwise specified, all tolerances are ± .010 / 0,25


Typical Inductance vs DC @ 25° C
300
250
200
150
0
.301
.281
.221
.151
0
10
20
30
40
50
60
70
DC bias A


Typical Inductance vs DC @ 100° C
300
250
200
150
100
0
.301
.281
.221
.151
0
10
20
30
40
50
60
70
DC bias A


Typical Inductance vs DC @ 125° C
300
250
200
150
100
0
.301
.281
.221
.151
0
10
20
30
40
50
60
70
DC bias A





**For More Information:**

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