

SMT Power Inductors

Power Beads - PA5615.XXXHLT Series



- Ⓢ **Current Rating:** Over 100A
- Ⓢ **Inductance Range:** 80nH to 100nH
- Ⓢ **Height:** 8.5mm Max
- Ⓢ **Footprint:** 10.0mm x 6.0mm Max

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

Part Number	Inductance @ 0 A _{dc} (nH±15%)	Inductance @ I _{sat} (nH MIN)	I _{rated} (ADC)	DCR mOHMS (±10%)	Saturation Current ⁵ (A TYP)		I _{rms} (A)
					25°C	100°C	
PA5615.800HLT	80	56	85	0.125	105	93	85
PA5615.101HLT	100	70	84		84	70	

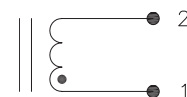
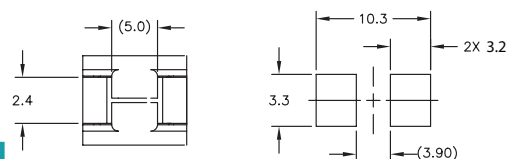
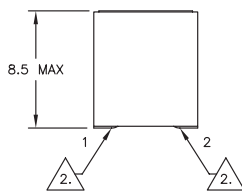
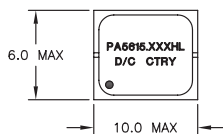
NOTES:

- Inductance measured at 100kHz, 100mVrms.
- Inductance at I_{rated} is the value of the inductance at 25°C at the listed rated current.
- 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.
- The nominal DCR is measured at point $\triangle 2$, as shown below on the mechanical drawing.
- The saturation current is the typical current which causes the inductance to drop by 20% at the stated ambient temperatures (25°C, 100°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 is the DC current which causes the part temperature to increase by approximately 40°C when used in a typical application.
- In high volt*time applications, additional heating in the component can occur due to core losses in the inductor which may necessitate 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 core loss and temperature rise curves can be used.
- Parts with the HLT suffix are sold in tape and reel packaging. Pulse complies to industry standard tape and reel specification EIA-481. The tape and reel for this product has a width (W=24mm), pitch (Po=12mm) and depth (Ko=9.2mm). Samples of these parts can be ordered by removing the HLT suffix and replacing with HL.
- The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- Sample Value only. Guaranteed by Design and not tested in production

Mechanical

Schematic

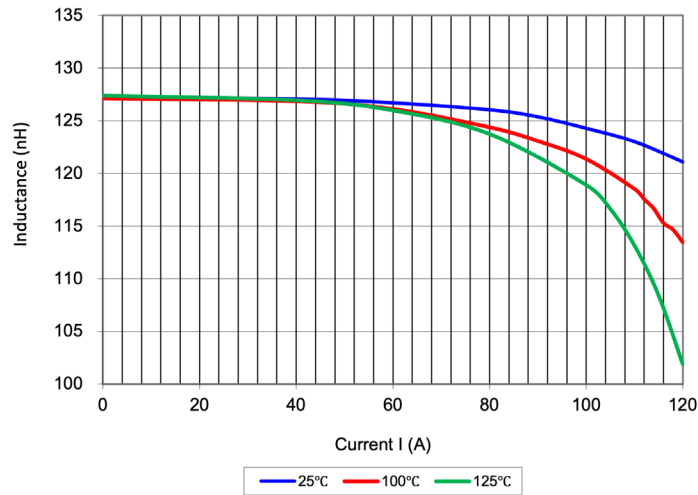
PA5615.XXXHLT



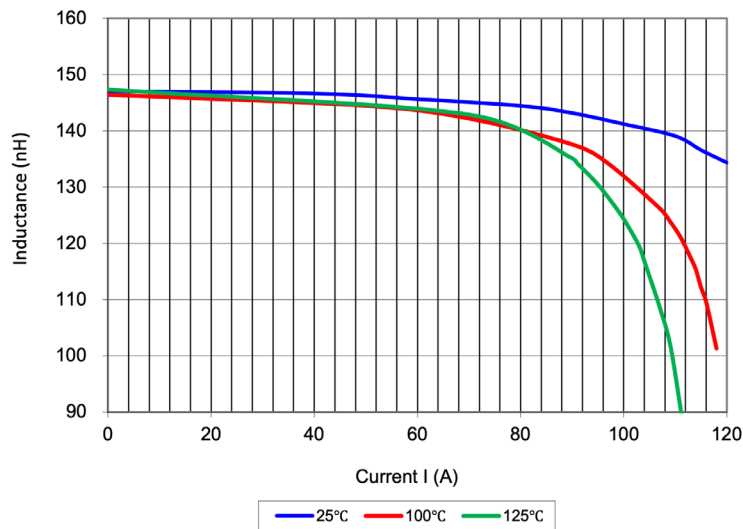
Weight: 3.2grms
Tape & Reel: 480/ Reel
Dimensions: mm
 Unless otherwise specified, all tolerances are ± 0.25

L vs I Curves

PA5615.101HLT, L vs I Curve



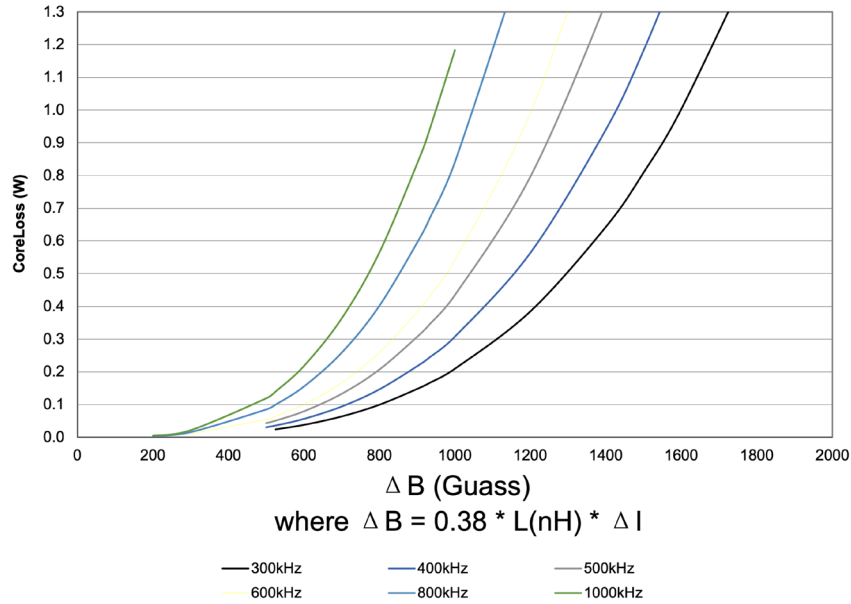
PA5615.800HLT, L vs I Curve



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PA5615.XXXHLT Coreloss



For More Information:

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