

SMT Power Inductors

Power Beads - PA5041 Series



- Current Rating:** Over 89A_{pk}
- Inductance Range:** 120nH to 330nH
- Height:** 11mm Max
- Footprint:** 7.2mm x 6.7mm Max

Electrical Specifications @ 25°C — Operating Temperature -40°C to +130°C⁷

Part Number	Inductance ¹ @ 0A _{dc} (nH ±10%)	Inductance ² @I _{rated} (nH TYP)	I _{rated} ³ (ADC)	DCR ⁴ (mΩ)	Saturation Current ⁵ (A TYP)		Heating Current ⁶ (A TYP)
					25°C	100°C	
PA5041.121HLT	120	120	40	0.29±10%	75	74	40
PA5041.151HLT	150	150	40		72	63	
PA5041.221HLT	220	220	40		50	42	
PA5041.331HLT	330	300	22		28	22	

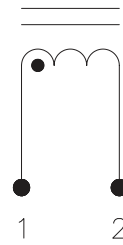
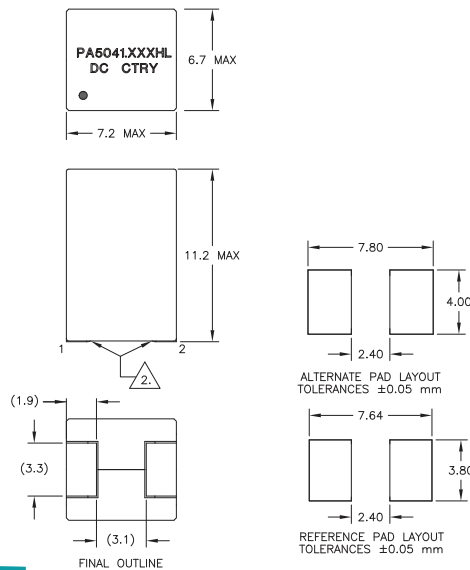
NOTES:

1. Inductance measured at 100kHz, 100mVrms.
2. Inductance at I_{rated} 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 ① to point ②, 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). 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 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 coreloss and temperature rise curves can be used.
8. Parts with the HLT suffix are sold in tape and reel packaging. Pulse complies to industry standard tape and reel specification EIA-481. Samples of these parts can be ordered by removing the HLT suffix and replacing with HL.
9. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

Mechanical

Schematic

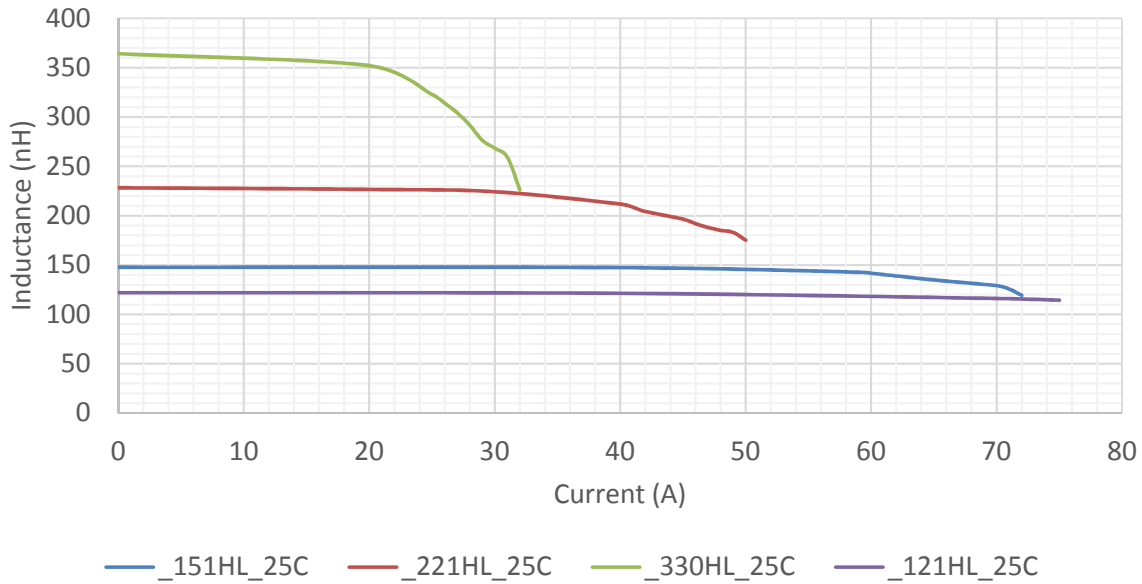
PA5041.XXXHLT



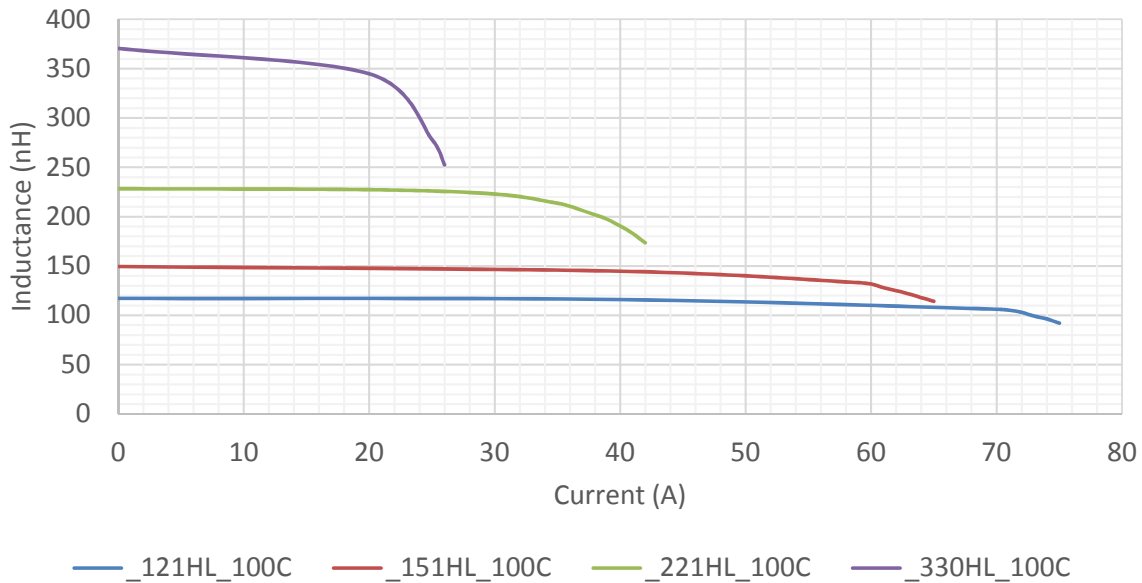
Weight1.8 grams
Tape & Reel300/reel

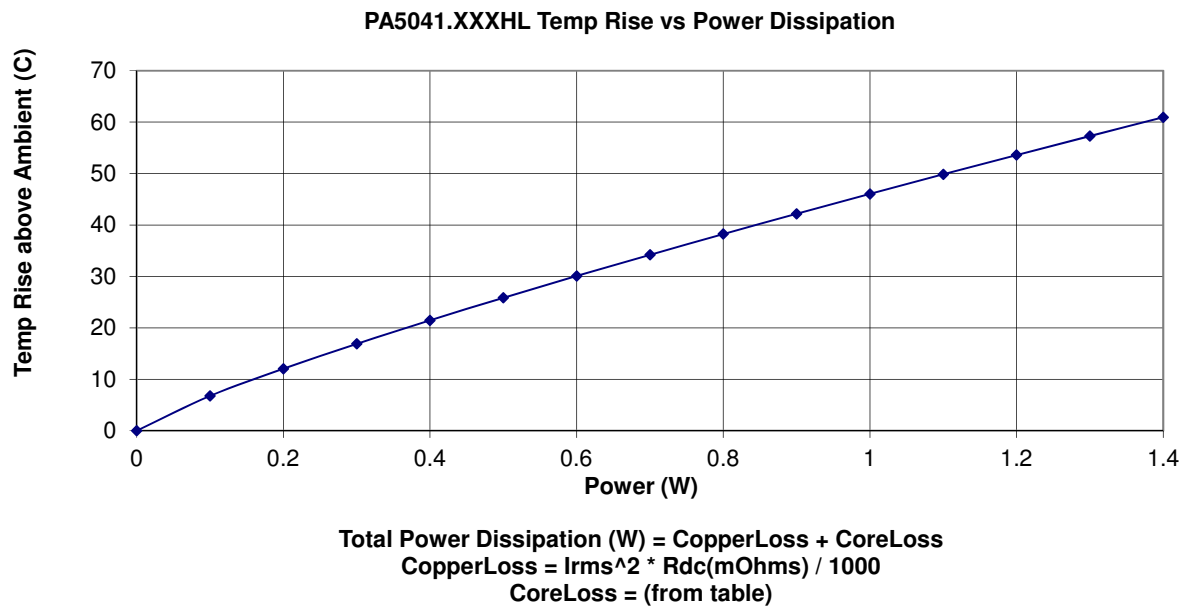
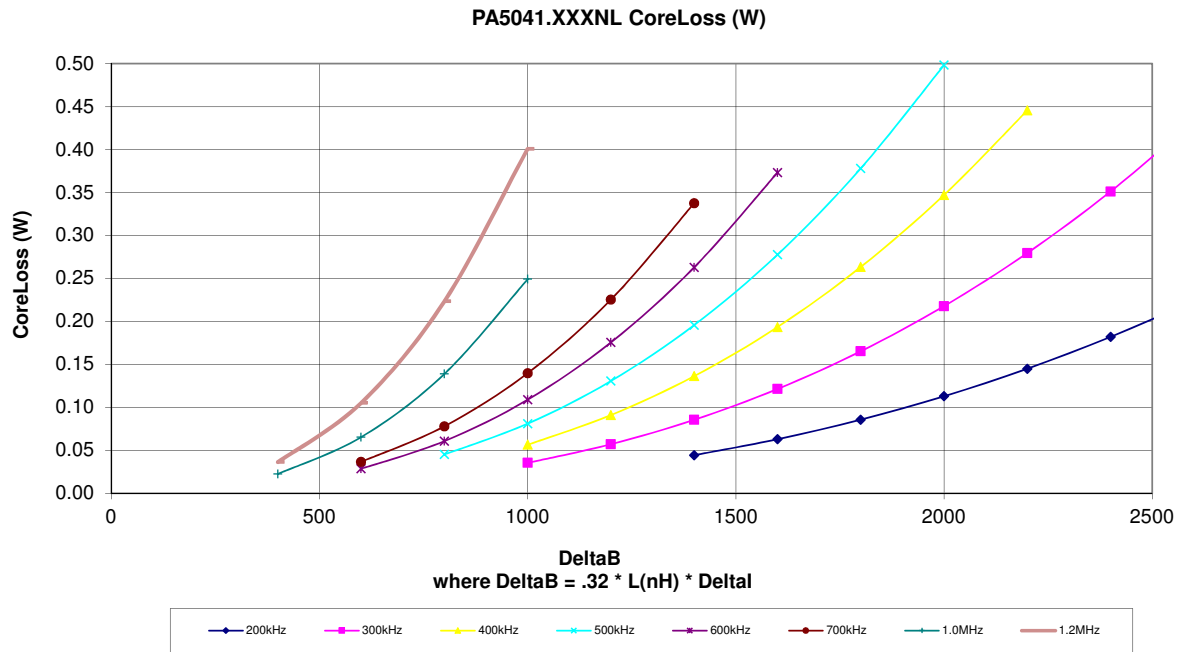
Dimensions: mm
 Unless otherwise specified,
 all tolerances are ±0.25

PA5041.XXXHL, LvsI, 25C



PA5041.XXXHL, LvsI, 100C

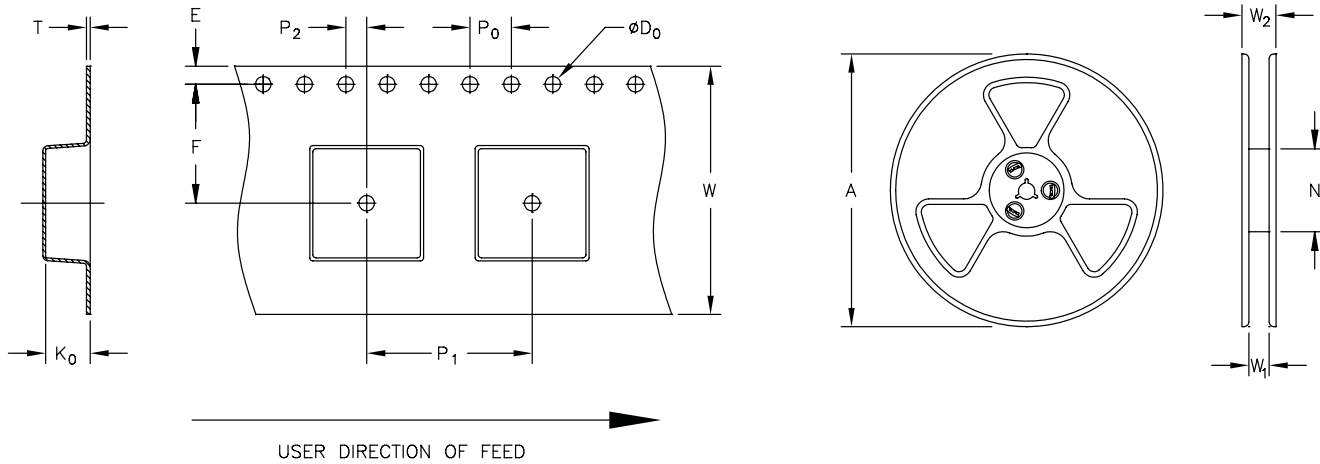




SMT Power Inductors

Power Beads - PA5041 Series

TAPE & REEL INFO



SURFACE MOUNTING TYPE, REEL/TAPE LIST

TYPE	REEL SIZE (mm)				TAPE SIZE (mm)								QTY	
	A	W ₁	W ₂	N	E	F	D ₀	P ₀	P ₁	P ₂	W	T	K ₀	PCS/REEL
PA5041.XXXHLT	Ø330	24.4	30.4	100	1.75	11.5	1.5	4	16	2	24	0.6	11.2	300

For More Information:

Americas - prodinfo_power_americas@yageo.com | Europe - prodinfo_power_emea@yageo.com | Asia - prodinfo_power_asia@yageo.com

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. © Copyright, 2023. Pulse Electronics, Inc. All rights reserved.