SMT Power Inductor

High Current Molded Power Inductor - PA4340.XXXANLT Series

Pulse
a YAGEO company

- ***Height:*** *3.0mm Max*
- ***Footprint:*** *6.0mm x 5.4mm Max*
- ***Current Rating:*** *up to 18.0A*
- ***Inductance Range:*** *0.20uH to 22.0uH*
- *Shielded construction and compact design*
- *High current, low DCR, and high efficiency*
- *Minimized acoustic noise and minimized leakage flux*
- *200 Vdc Isolation between terminal and core*

Electrical Specifications @ 25°C - Operating Temperature -55°C to +155°C

Part Number[6,7]	Inductance[5,8] 100KHz, 1V	Rated[3] Current	DC Resistance		Saturation[2] Current	SRF	K Factor
		TYP.	TYP.	MAX.	TYP.	TYP.	
	uH±20%	A	mΩ	mΩ	A	MHz	
PA4340.201ANLT	0.20	18.0	2.5	2.8	21	133	587.4
PA4340.331ANLT	0.33	16.0	4.5	5.4	10	100	655.0
PA4340.471ANLT	0.47	13.5	5.2	6.0	9.0	75	535.9
PA4340.681ANLT	0.68	12.5	7.4	8.5	8.0	65	343.0
PA4340.821ANLT	0.82	10.0	8.0	9.2	7.7	52	290.2
PA4340.102ANLT	1.00	9.0	10.5	12.0	7.5	50	225.9
PA4340.152ANLT	1.50	8.0	13.6	15.7	6.5	38	172.8
PA4340.222ANLT	2.20	7.0	21.6	25.0	5.8	30	139.9
PA4340.332ANLT	3.30	6.3	28.0	33.0	5.3	24	92.3
PA4340.472ANLT	4.70	5.5	38.0	44.0	4.6	20	78.6
PA4340.562ANLT	5.60	5.0	50.0	58.0	4.0	18	68.5
PA4340.682ANLT	6.80	4.3	57.0	66.0	3.1	17	76.0
PA4340.103ANLT	10.0	3.8	88.0	103	2.1	14	79.2
PA4340.153ANLT	15.0	2.9	140	170	1.7	12	51.1
PA4340.223ANLT	22.0	2.4	190	228	1.7	10	39.1

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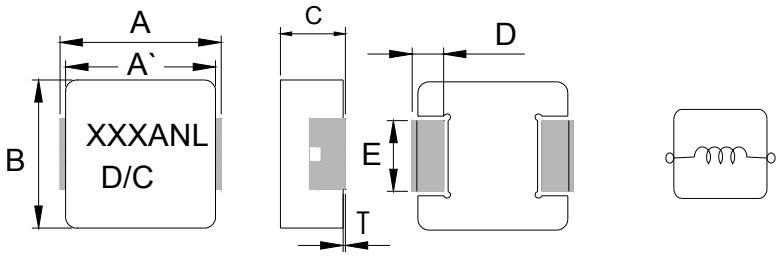
Notes:

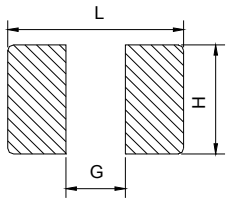
1. Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
2. The saturation current is the current at which the initial inductance drops by approximately 30% at the stated ambient temperature. The maximum allowable drop at this stated current is 40% of the initial inductance. This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effect) to the component.
3. The rated current is the DC current required to raise the component temperature by approximately 40°C. Take note that the components' performanc varies depending on the system condition. It is suggested that the component be tested at the system level, to verify the temperature rise of the component during system operation.
4. The part temperature (ambient+temp rise) should not exceed maximum operating temperature under worst case operating conditions. Circuit design, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
5. Please note that the inductance tolerance of all parts are ±20%, except those indicated by an * which are +/- 30%.
6. Parts shown in bold are standard catalog parts and are available through sample stock and distribution. Parts in lighter font are available but are not necessarily held in sample stock or distribution and lead times may be longer. Please contact Pulse for availablity.
7. The mechanical dimensions are 100% tested in production but do not necessarily meet a product capability index (Cpk) 1.33 and therefore may not strictly conform to PPAP.
8. Special Characteristics ▽

Mechanical

PA4340.XXXANLT



Final Layout

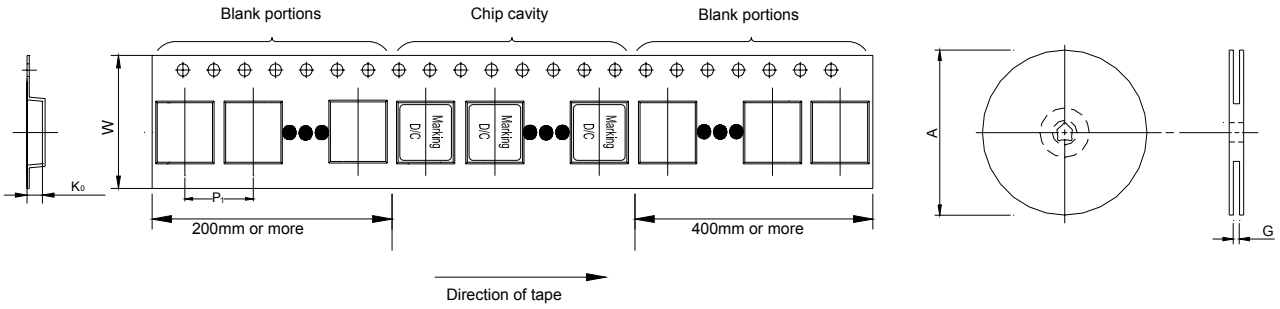


SUGGESTED PAD LAYOUT

Series	A	A`	B	C	D	E	T	L	G	H
PA4340.XXXANLT	5.7±0.3	5.2±0.3	5.2±0.2	2.8±0.2	1.1±0.3	2.0±0.2	0~0.15	6.0	2.8	2.5

All Dimensions in mm.

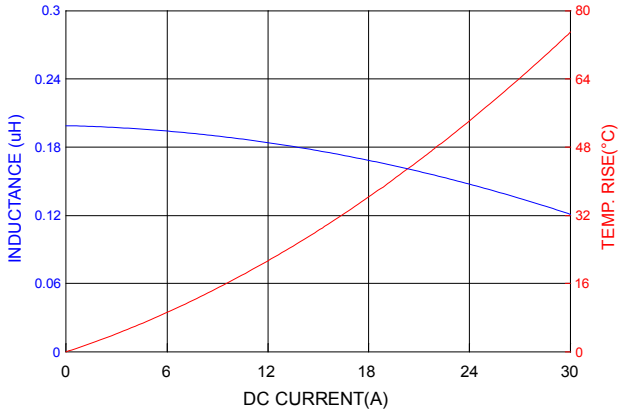
TAPE & REEL INFO



SURFACE MOUNTING TYPE, REEL/TAPE LIST						
	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P_1	W	K_0	PCS/REEL
PA4340.XXXANLT	Ø330	12.4+2/-0	8.0±0.1	12.0±0.3	3.3±0.1	2000

Typical Performance Curves

PA4340.201ANLT



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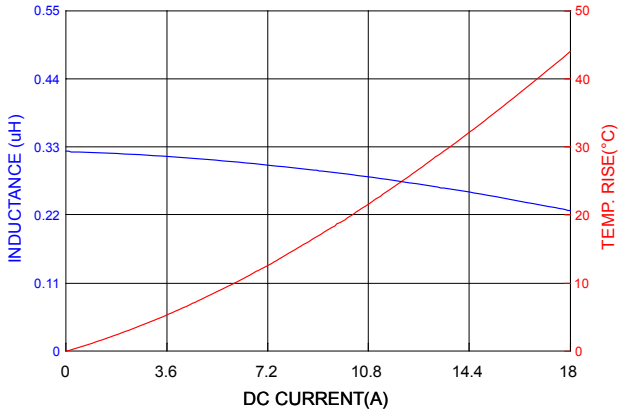

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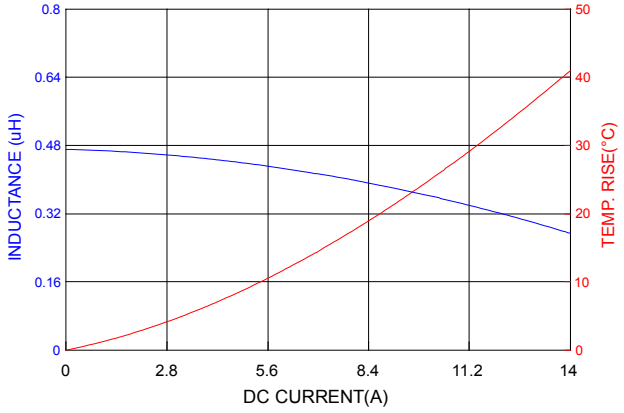

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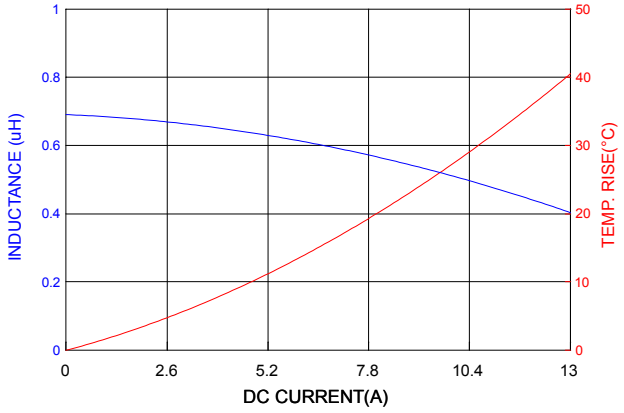
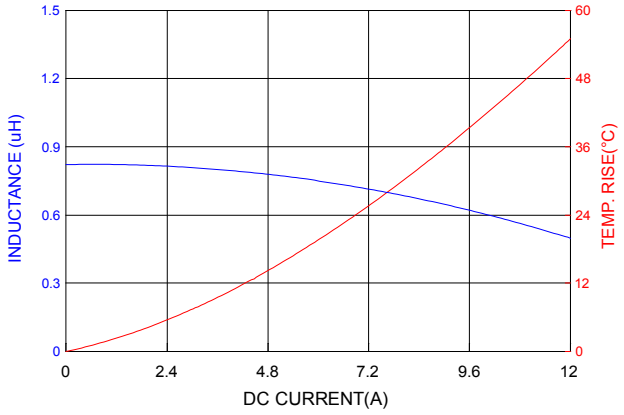


PA4340.821ANLT



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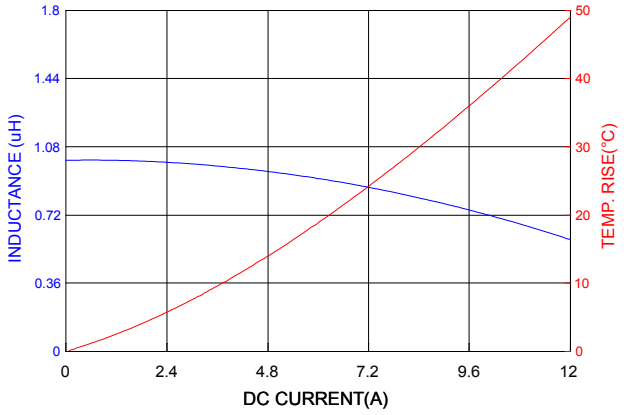

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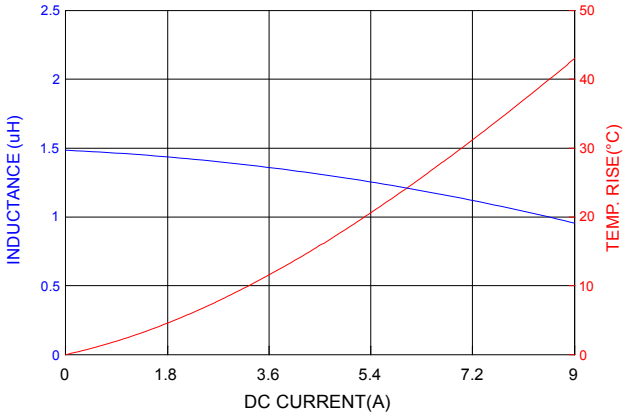

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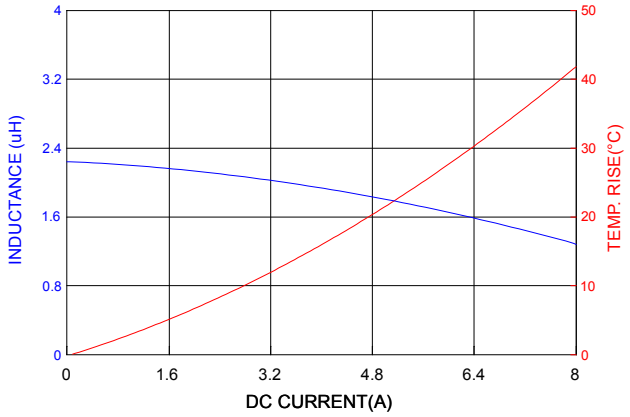

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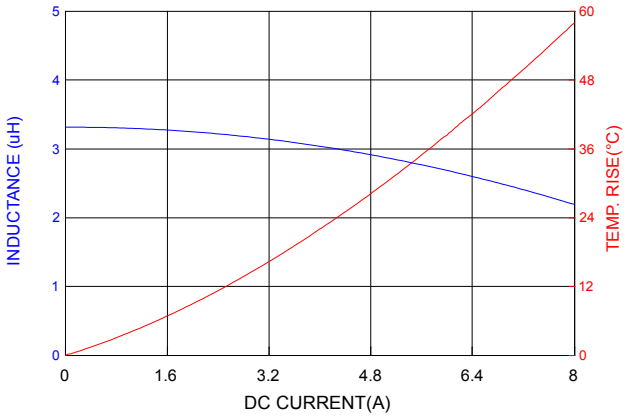

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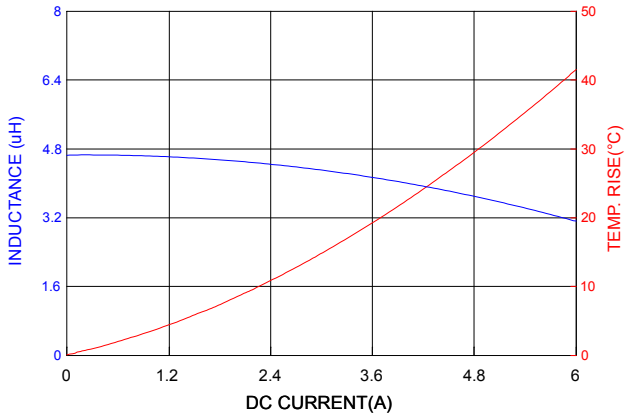

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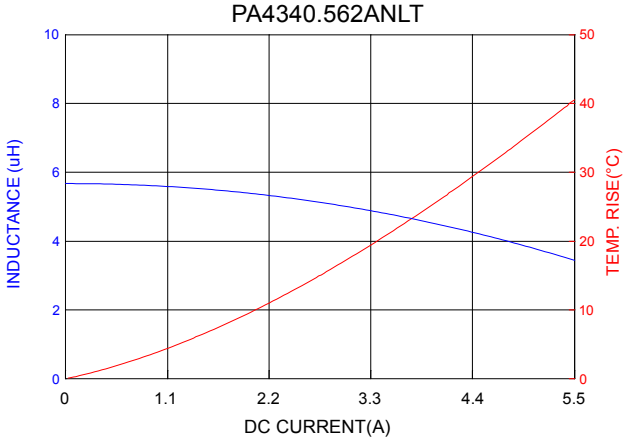

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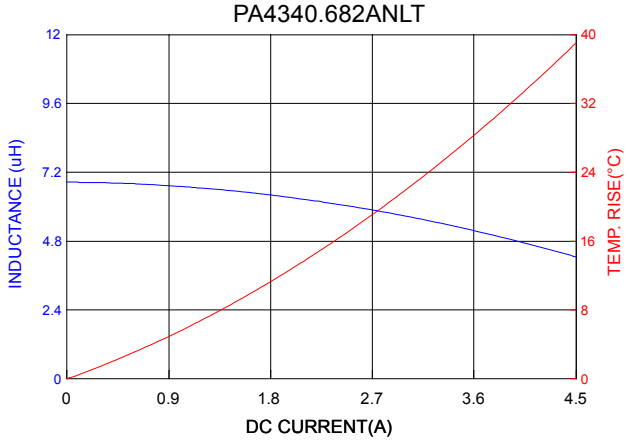

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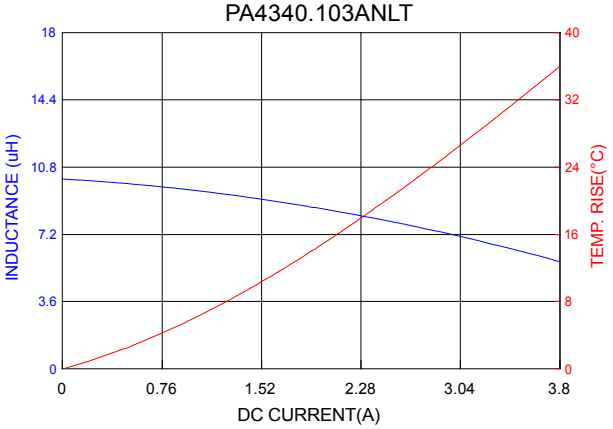

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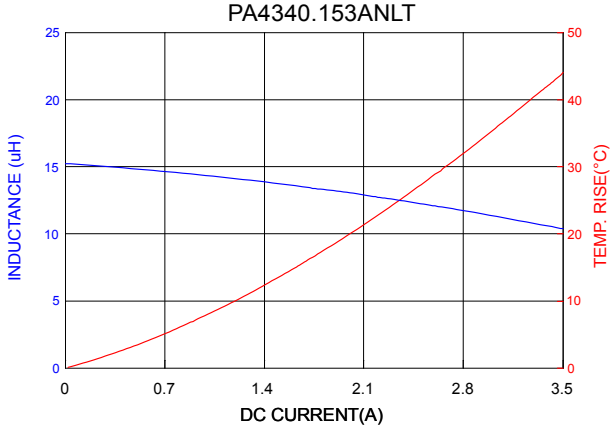

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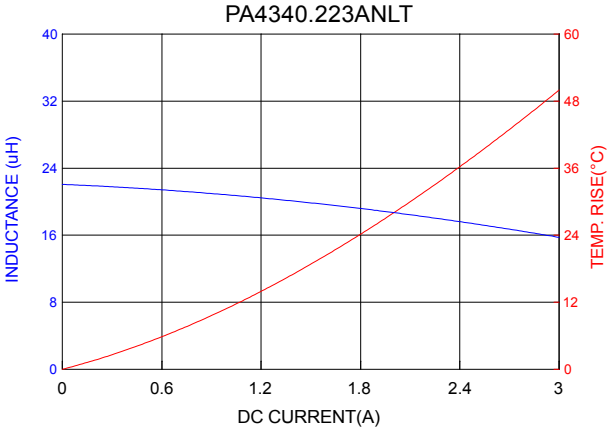

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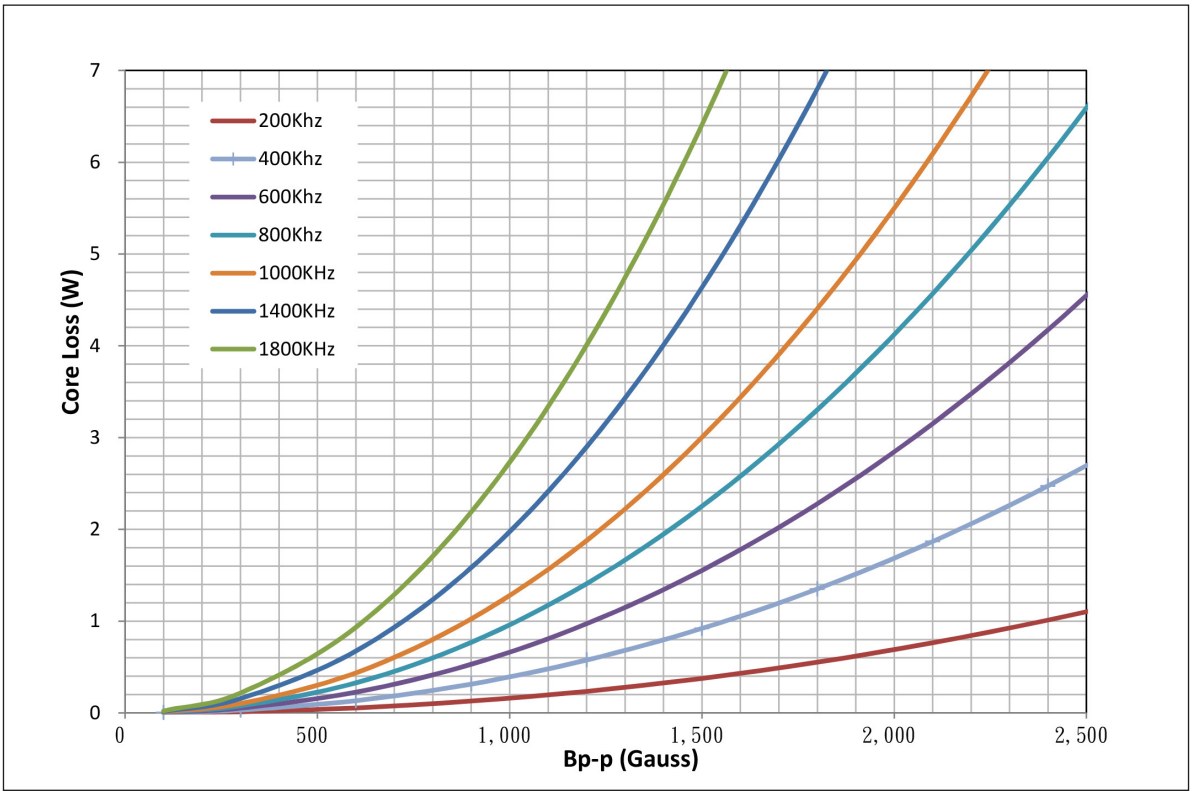
Core Loss



Bp-p = K *L(uH) *delta I(A)

For More Information:

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