

# SMT Power Inductor

High Current Molded Power Inductor - PA4344.XXXNLT Series



- Height: 7.0mm Max
- Footprint: 17.7mm x 17.2mm Max
- Current Rating: up to 52.0A
- Inductance Range: 1.0uH to 100uH
- Shielded construction and compact design
- High current, low DCR, and high efficiency
- Minimized acoustic noise and minimized leakage flux
- 200Vdc Isolation between terminal and core

Electrical Specifications @ 25°C - Operating Temperature -55°C to +125°C

Part Number	Inductance 100KHz, 1V uH±20%	Rated Current A	DC Resistance		Saturation Current 1 Max. A	Saturation Current 2 Max. A
			MAX.	TYP.		
			mΩ	mΩ		
PA4344.102NLT	1.0	52.0	2.0	1.6	60.0	70.0
PA4344.132NLT	1.3	49.0	2.3	1.7	54.0	67.0
PA4344.152NLT	1.5	47.0	2.5	2.0	52.0	65.0
PA4344.222NLT	2.2	43.5	2.7	2.4	47.0	62.0
PA4344.332NLT	3.3	28.0	3.9	3.5	45.0	54.0
PA4344.472NLT	4.7	25.0	5.5	4.8	41.0	50.0
PA4344.562NLT	5.6	21.0	7.05	5.8	40.0	45.0
PA4344.682NLT	6.8	19.0	9.2	8.4	32.0	39.0
PA4344.822NLT	8.2	18.0	10.8	9.6	25.0	31.0
PA4344.103NLT	10.0	16.5	13.0	11.8	24.0	29.0
PA4344.153NLT	15.0	12.5	20.5	17.8	23.0	27.0
PA4344.223NLT	22.0	12.0	26.5	25.1	18.0	23.0
PA4344.333NLT	33.0	10.7	44.0	38.0	15.0	20.0
PA4344.393NLT	39.0	9.2	48.0	40.0	11.0	18.0
PA4344.473NLT	47.0	8.7	55.0	48.0	9.5	16.0
PA4344.563NLT	56.0	7.8	62.0	54.0	9.0	15.0
PA4344.683NLT	68.0	7.0	80.0	68.0	8.0	13.0
PA4344.104NLT	100	5.3	118.0	102.0	6.5	12
PA4343.332NLT	3.30±20%	18.0	6.8	5.7	30.0	Footprint 2

Notes:

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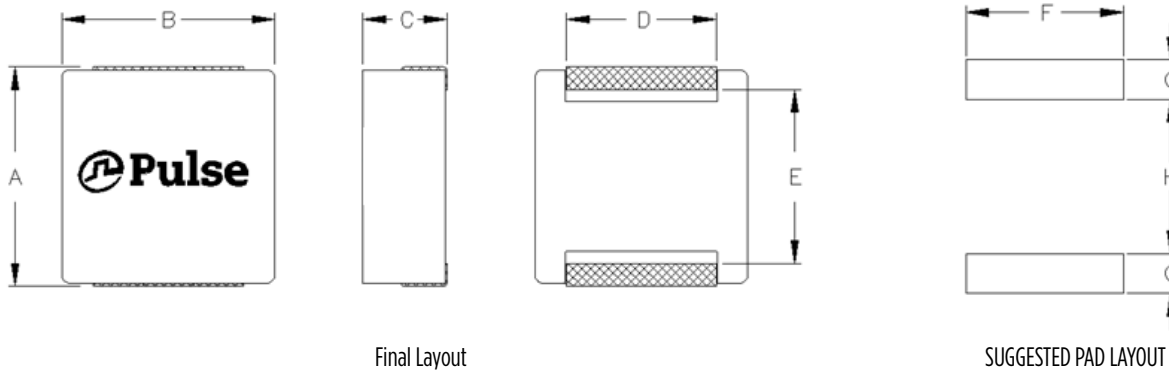


## Notes:

1. Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
2. The saturation current 1 is the current at which the initial inductance drops approximately 30% at the stated ambient temperature. 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 saturation current 2 is the current at which the initial inductance drops approximately 40% at the stated ambient temperature. 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.
4. The rated current is the DC current required to raise the component temperature by approximately 40 °C. Take note that the components' performance 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.
5. The part temperature (ambient+temp rise) should not exceed 125 °C 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.

## Mechanical

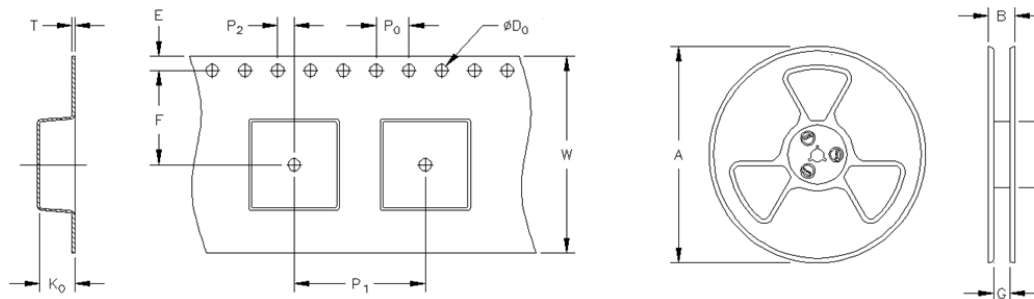
### PA4344.XXXNLT



Series	A	B	C	D	E	F	G	H
PA4344.XXXNLT	17.7 Max	17.2 Max	7.0 Max	(11.9)	(13.1)	(12.5)	(3.15)	(12.2)

All Dimensions in mm.

## TAPE & REEL INFO

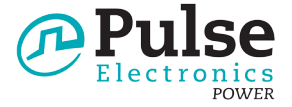


### SURFACE MOUNTING TYPE, REEL/TAPE LIST

	REEL SIZE (mm)				TAPE SIZE (mm)									QTY
	A	B	G	N	E	F	D <sub>0</sub>	P <sub>1</sub>	P <sub>0</sub>	P <sub>2</sub>	W	T	K <sub>0</sub>	PCS/REEL
PA4344.XXXNLT	Ø330	N/A	32	100	1.75	14.2	1.5	24	4	2	32	0.5	7.5	200

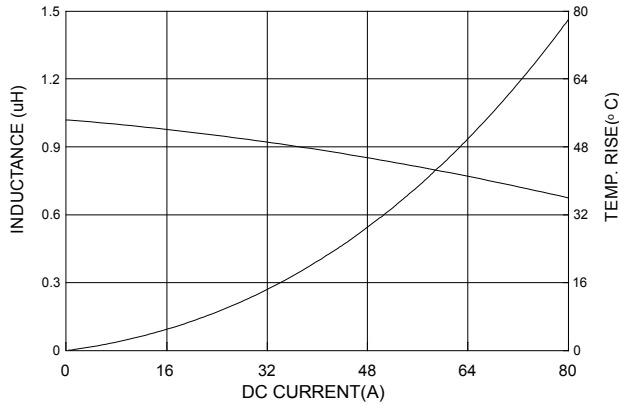
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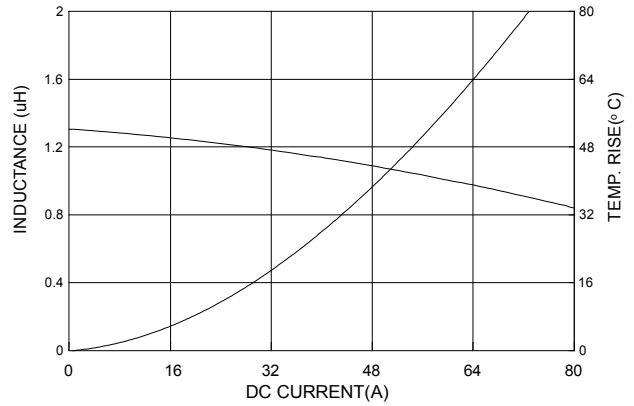


## Typical Performance Curves

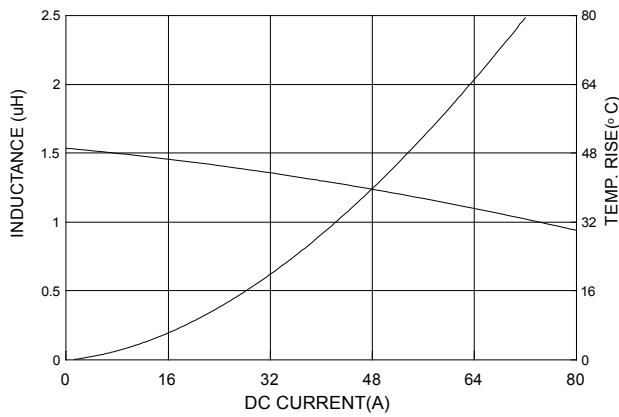
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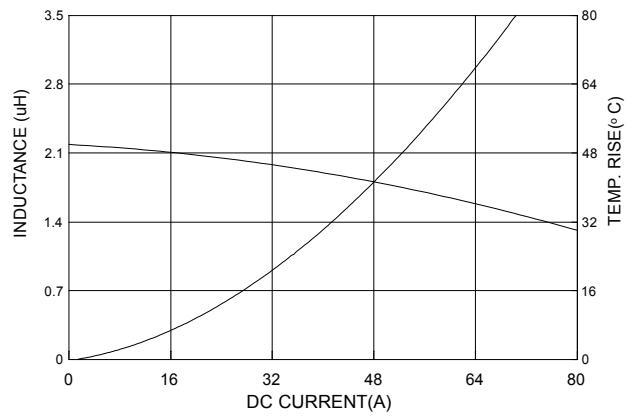
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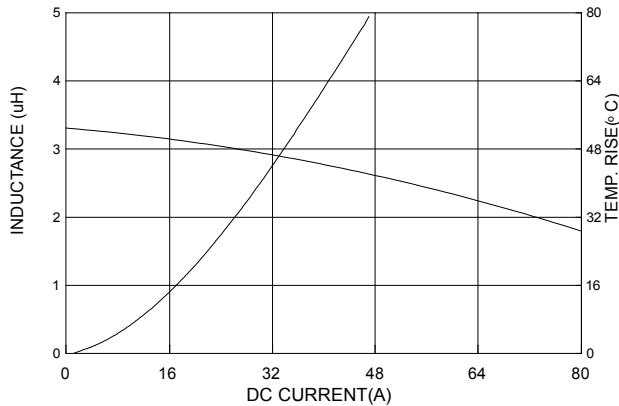
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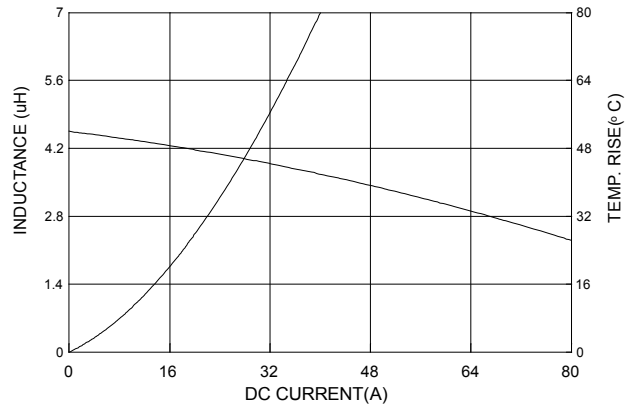
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PA4344.332NLT

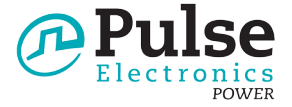


PA4344.472NLT

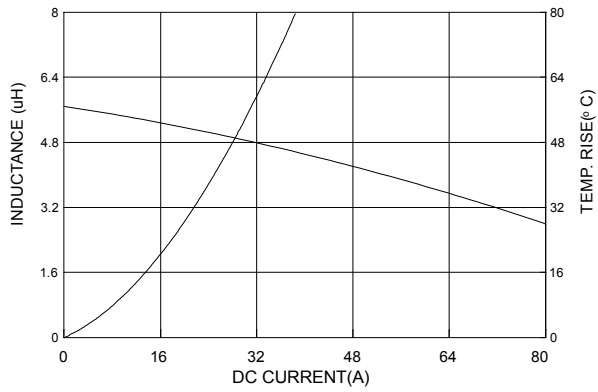


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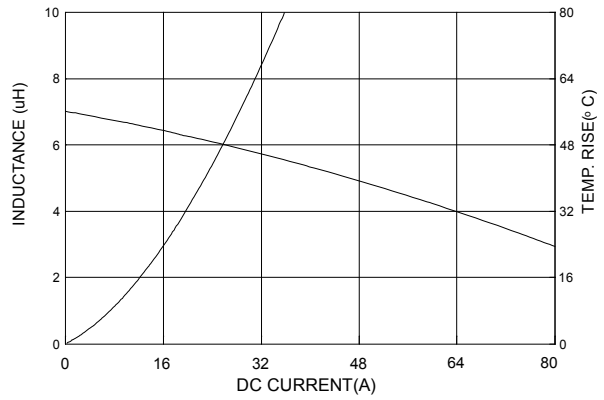
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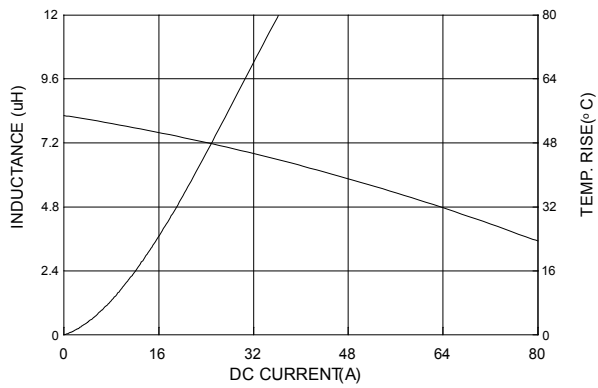
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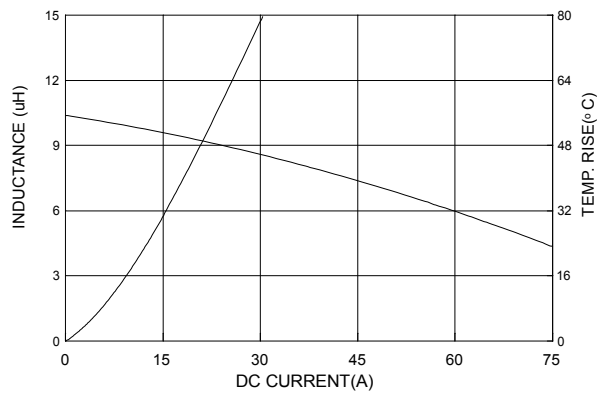
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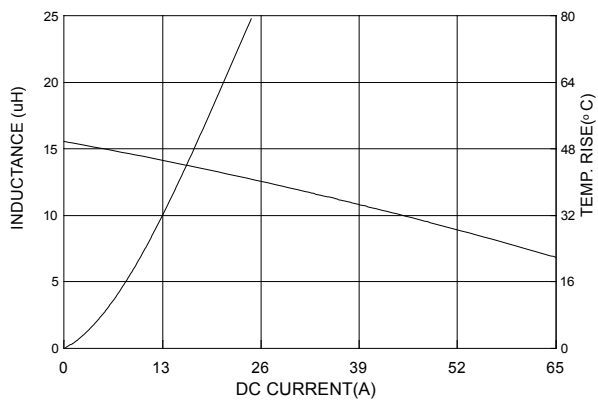
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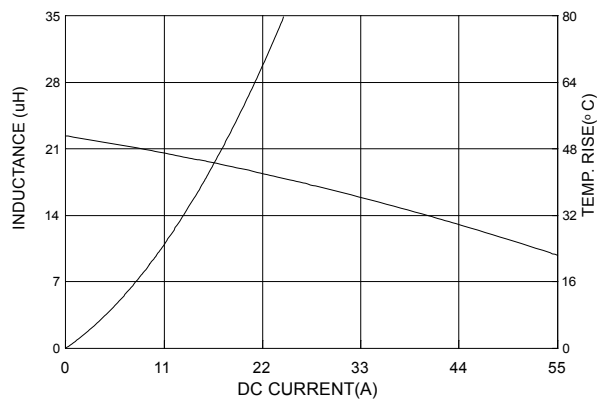
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PA4344.153NLT

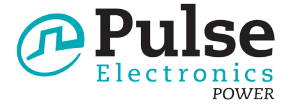


PA4344.223NLT

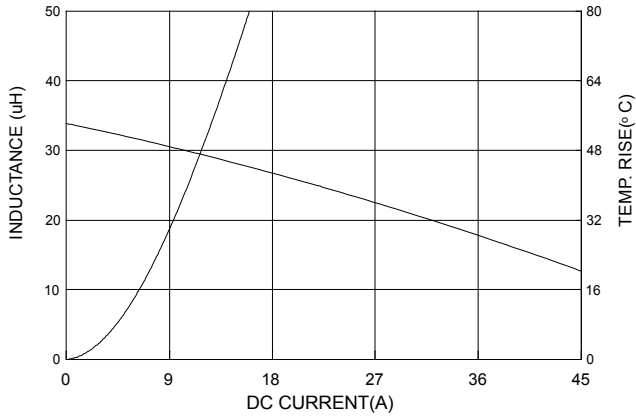


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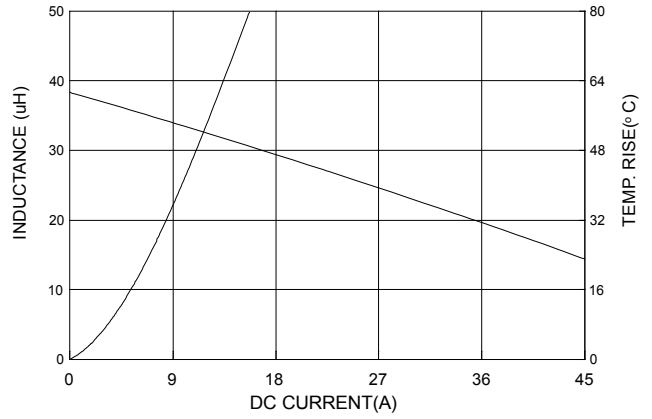
High Current Molded Power Inductor - PA4344.XXXNLT Series



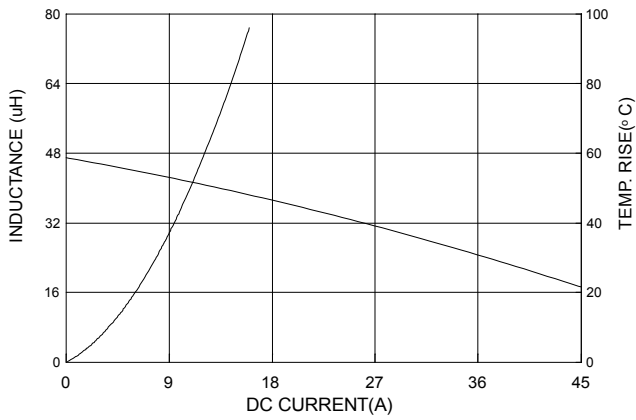
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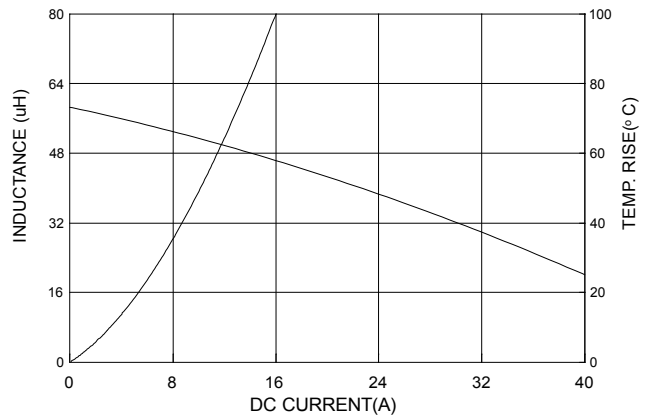
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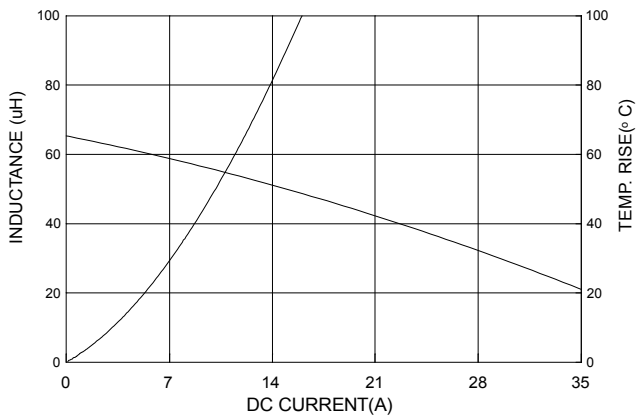
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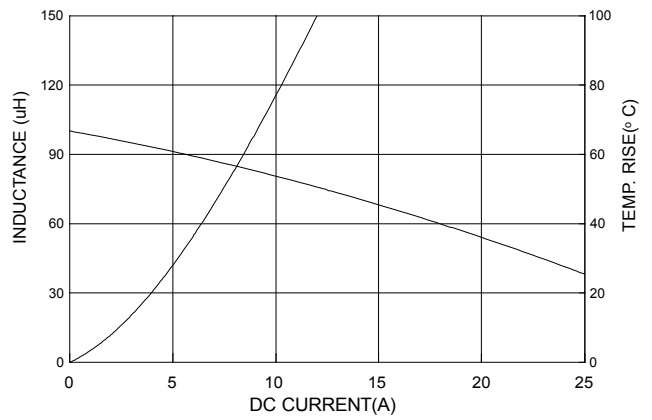
PA4344.563NLT



PA4344.683NLT



PA4344.104NLT



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