

SMT Power Inductor

High Current Molded Power Inductor - PA4343.XXXNLT Series



- Height:** 6.5mm Max
- Footprint:** 14.0mm x 12.8mm Max
- Current Rating:** up to 55.0A
- Inductance Range:** 0.15uH to 47.0uH
- 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	Rated Current A	DC Resistance		Saturation Current Max. A	Mechanical
			MAX.	TYP.		
			mΩ	mΩ		
PA4343.151NLT	0.15±30%	55.0	0.60	0.49	118.0	Footprint 1
PA4343.221NLT	0.22±20%	53.0	0.60	0.47	112.0	Footprint 1
PA4343.301NLT	0.30±20%	48.0	0.72	0.60	72.0	Footprint 1
PA4343.331NLT	0.33±20%	46.0	0.8	0.65	68.0	Footprint 1
PA4343.361NLT	0.36±20%	45.0	0.9	0.7	66.0	Footprint 1
PA4343.401NLT	0.40±20%	44.0	1.0	0.7	64.0	Footprint 1
PA4343.451NLT	0.45±20%	42.0	1.2	0.9	63.0	Footprint 1
PA4343.471NLT	0.47±20%	41.0	1.2	0.9	63.0	Footprint 1
PA4343.501NLT	0.50±20%	40.0	1.25	0.92	60.0	Footprint 1
PA4343.561NLT	0.56±20%	37.0	1.2	1.05	58.0	Footprint 1
PA4343.681NLT	0.68±20%	35.0	1.5	1.25	55.0	Footprint 1
PA4343.821NLT	0.82±20%	33.0	1.9	1.5	50.0	Footprint 1
PA4343.102NLT	1.00±20%	30.0	2.3	1.7	48.0	Footprint 1
PA4343.142NLT	1.40±20%	27.0	2.6	2.1	46.0	Footprint 1
PA4343.152NLT	1.50±20%	27.0	3.0	2.5	45.0	Footprint 1
PA4343.182NLT	1.80±20%	27.0	4.0	3.6	40.0	Footprint 2
PA4343.222NLT	2.20±20%	22.0	4.2	3.8	37.0	Footprint 2
PA4343.272NLT	2.70±20%	20.0	5.5	4.3	32.0	Footprint 2
PA4343.332NLT	3.30±20%	18.0	6.8	5.7	30.0	Footprint 2

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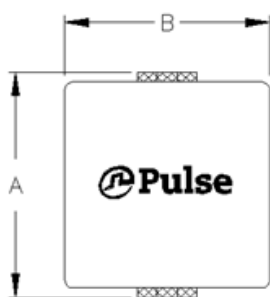
Electrical Specifications @ 25°C - Operating Temperature -55°C to +125°C

Part Number	Inductance 100KHz, 1V uH	Rated Current A	DC Resistance		Saturation Current Max. A	Mechanical
			MAX.	TYP.		
			mΩ	mΩ		
PA4343.472NLT	4.70±20%	13.5	8.4	7.0	28.0	Footprint 2
PA4343.562NLT	5.60±20%	12.5	10.0	8.5	23.0	Footprint 2
PA4343.682NLT	6.80±20%	11.5	11.5	9.5	18.0	Footprint 2
PA4343.822NLT	8.20±20%	10.5	15.5	12.0	15.5	Footprint 2
PA4343.103NLT	10.0±20%	10.0	16.5	13.2	15.5	Footprint 2
PA4343.133NLT	13.0±20%	9.0	24.0	21.0	13.0	Footprint 2
PA4343.153NLT	15.0±20%	9.0	28.0	23.2	12.5	Footprint 2
PA4343.223NLT	22.0±20%	9.0	37.0	32.5	12.0	Footprint 2
PA4343.333NLT	33.0±20%	8.0	58.0	48.0	11.0	Footprint 2
PA4343.473NLT	47.0±20%	6.5	90.0	76.0	9.5	Footprint 2

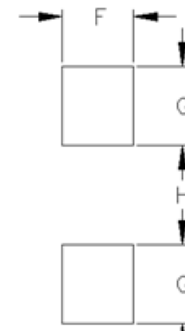
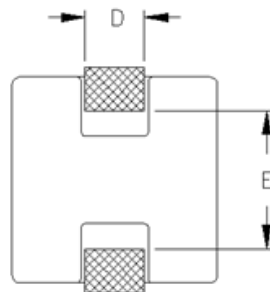
- Notes:**
- Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
 - The saturation current is the current at which the initial inductance drops approximately 30% at the stated ambient temperature. This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effect) to the component.
 - 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.
 - 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

PA4343.XXXNLT



Final Layout



SUGGESTED PAD LAYOUT

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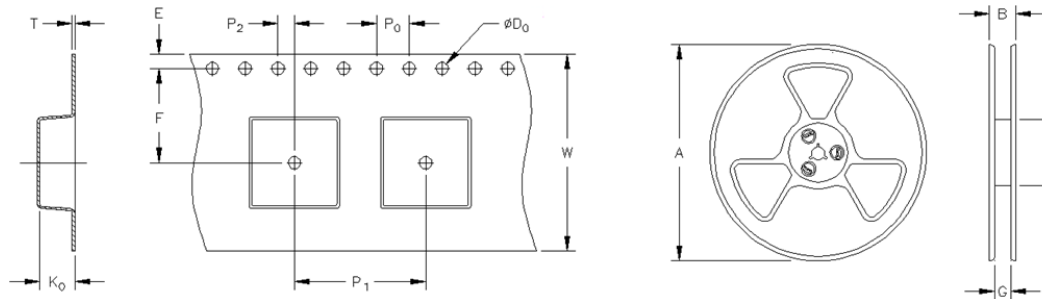
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Series	Mechanical	A	B	C	D	E	F	G	H
PA4343.XXXNLT	Footprint 1	14.0 Max	12.8 Max	6.5 Max	(4.0)	(8.9)	(4.3)	(3.1)	(8.0)
PA4343.XXXNLT	Footprint 2	14.0 Max	12.8 Max	6.5 Max	(4.7)	(8.9)	(5.0)	(3.1)	(8.0)

All Dimensions in mm.

TAPE & REEL INFO

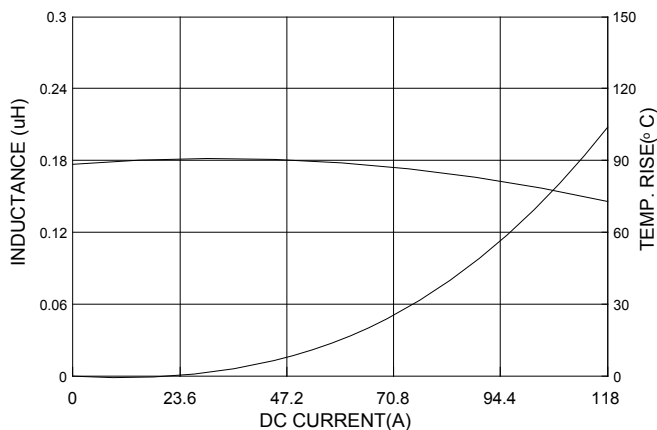


SURFACE MOUNTING TYPE, REEL/TAPE LIST

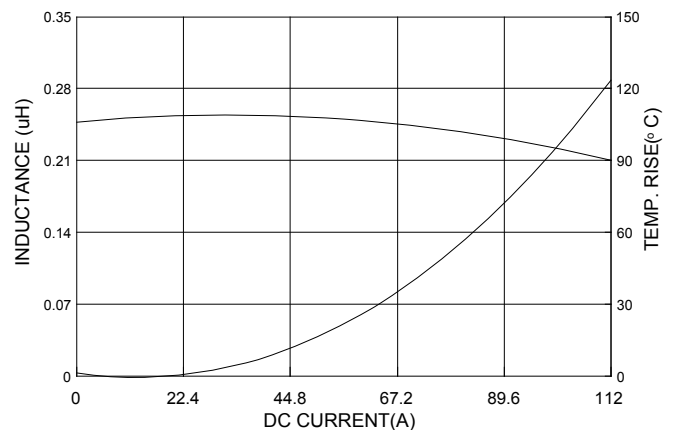
	REEL SIZE (mm)				TAPE SIZE (mm)									QTY
	A	B	G	N	E	F	D ₀	P ₁	P ₀	P ₂	W	T	K ₀	PCS/REEL
PA4343.XXXNLT	Ø330	N/A	24	100	1.75	11.5	1.5	16	4	2	24	0.35	7.0	500

Typical Performance Curves

PA4343.151NLT



PA4343.221NLT

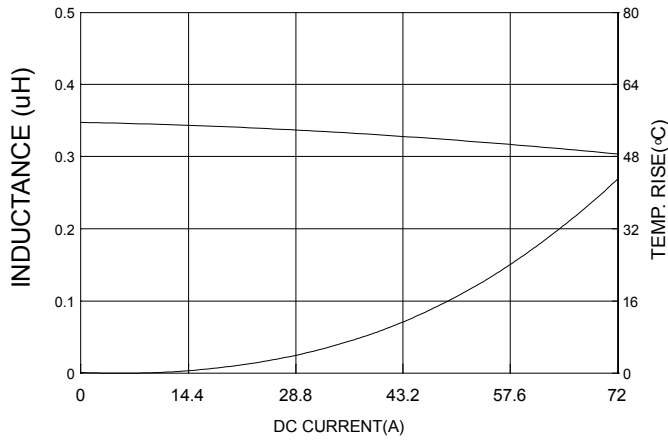


SMT Power Inductor

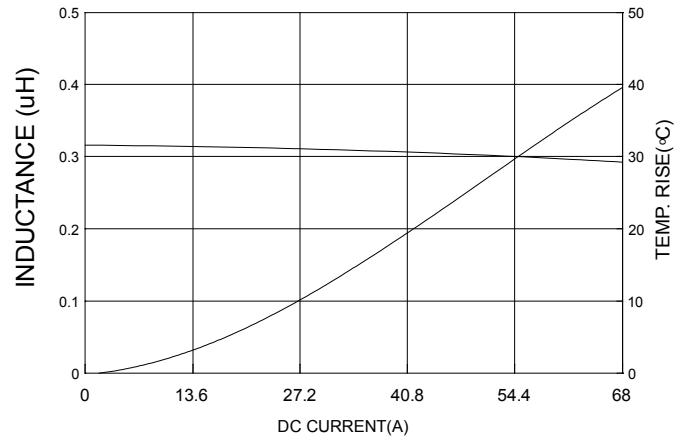
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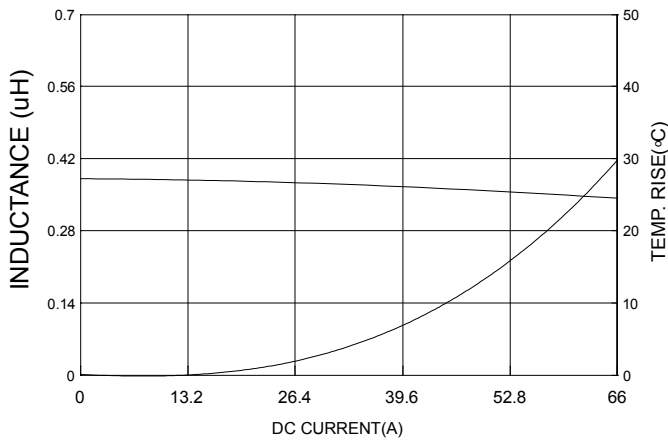
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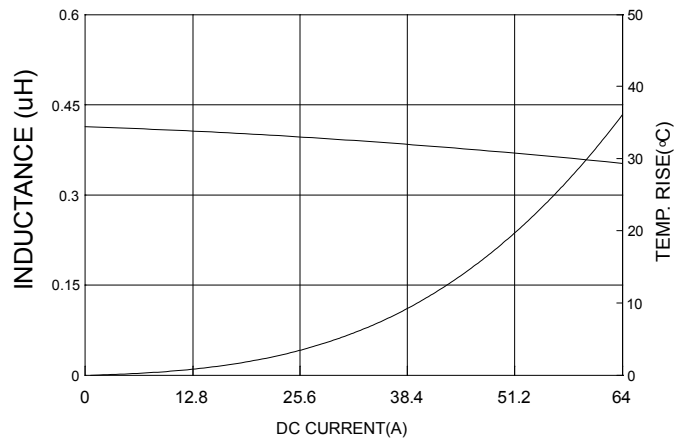
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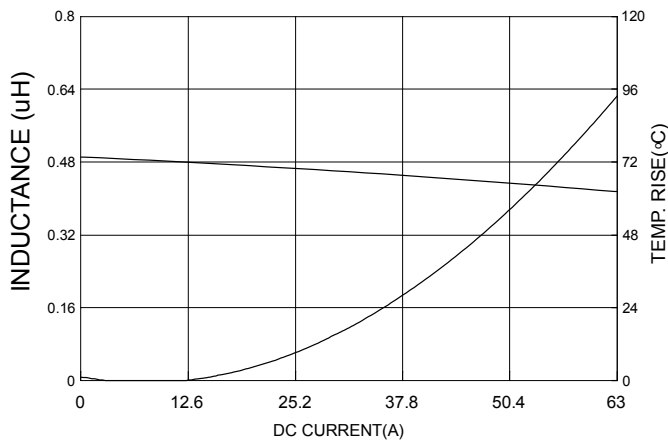
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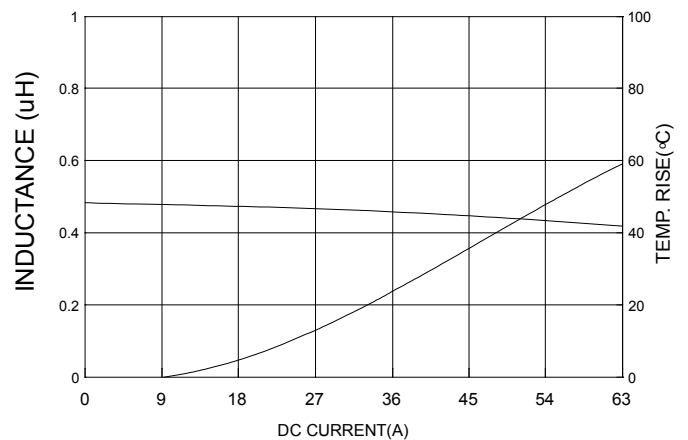
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PA4343.451NLT



PA4343.471NLT

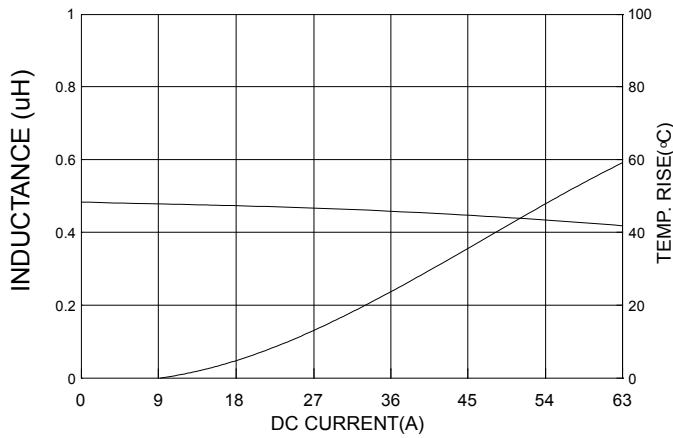


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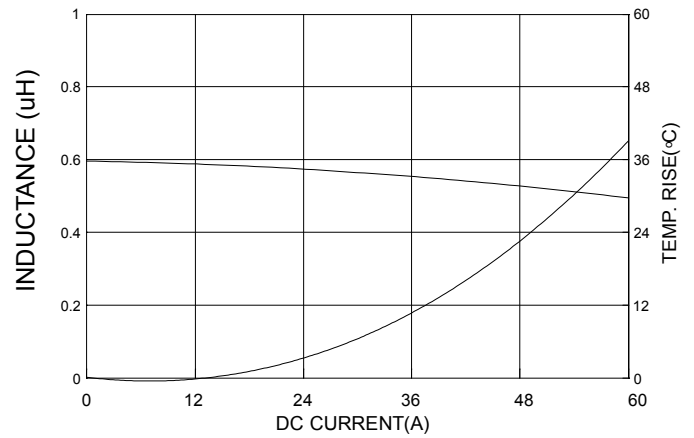
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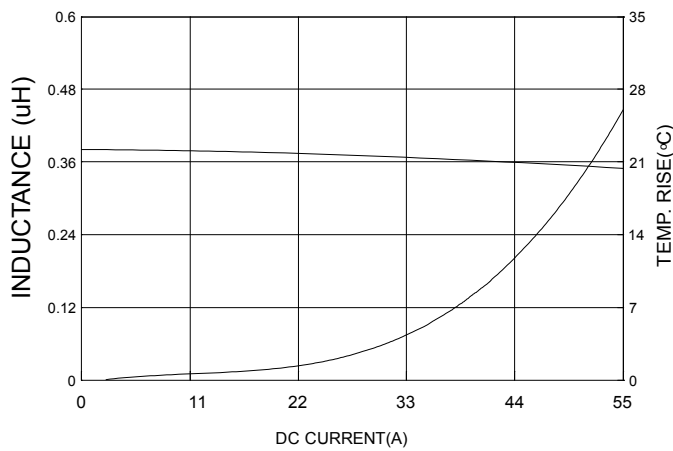
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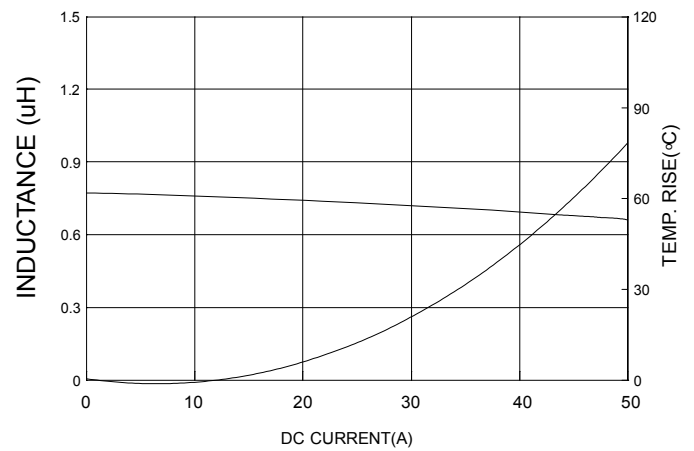
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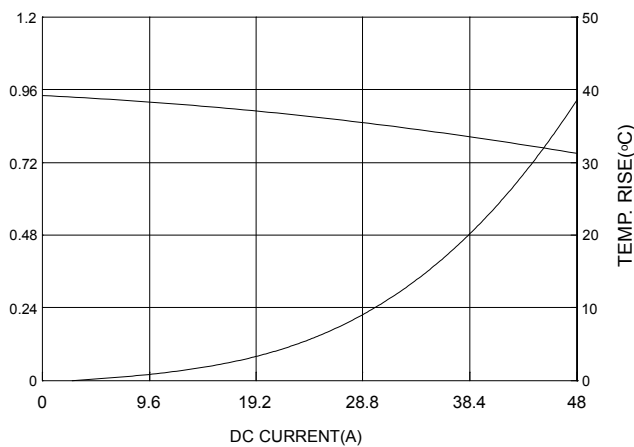
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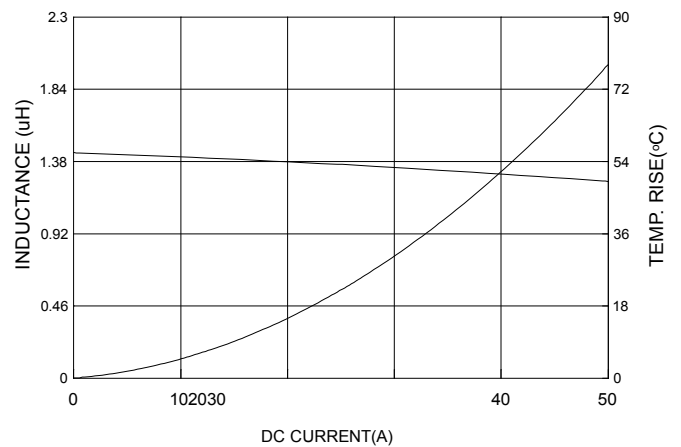
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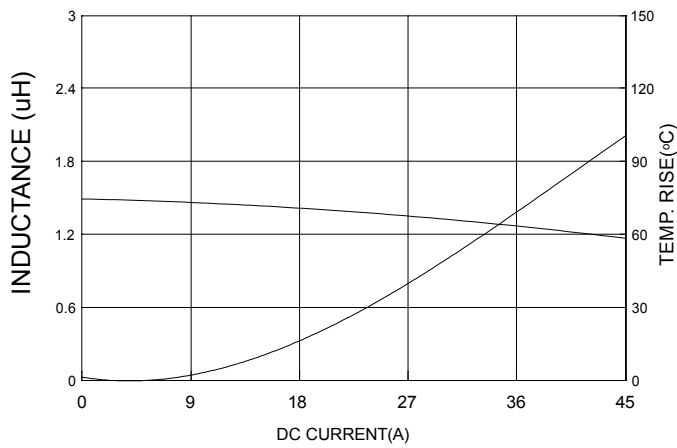
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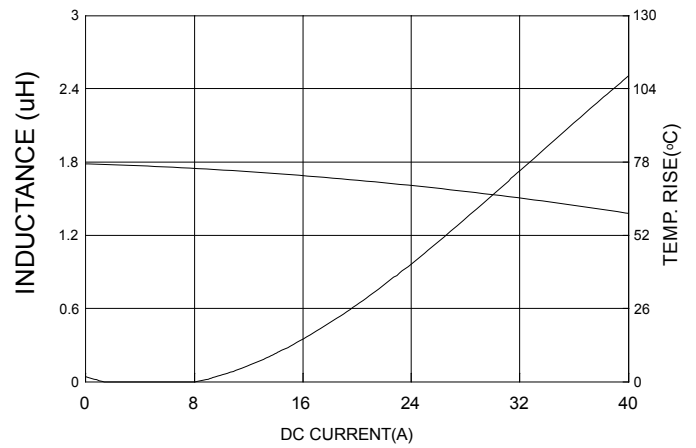
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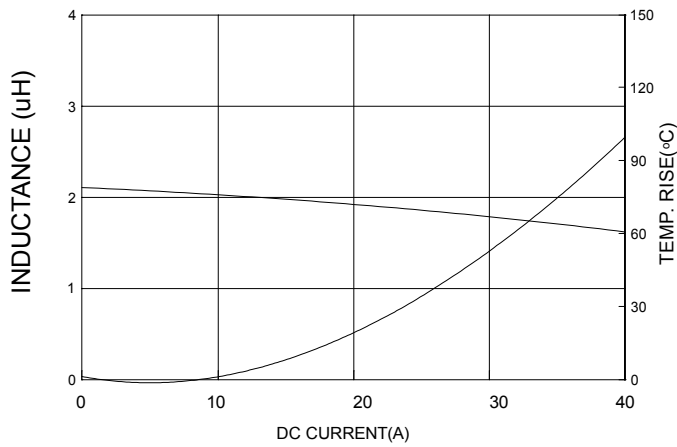
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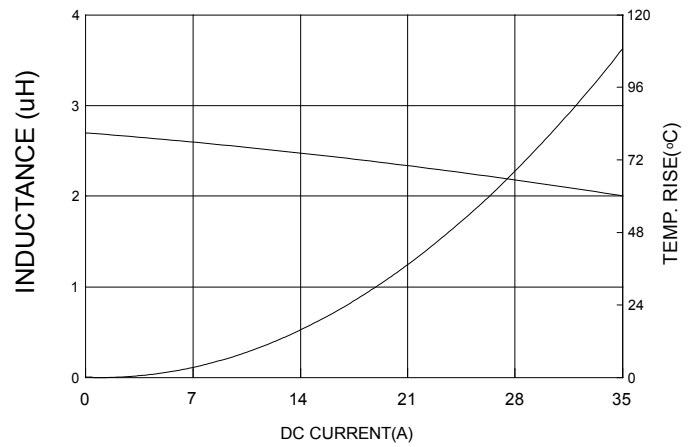
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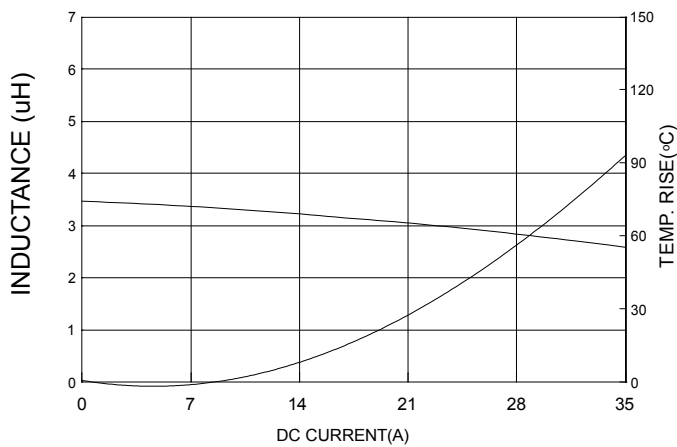
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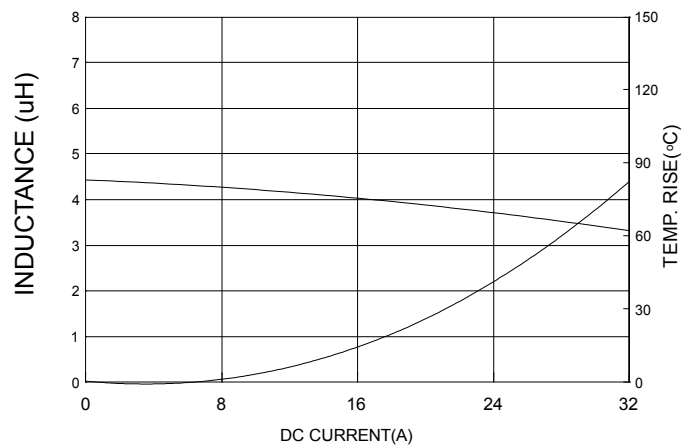
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PA4343.332NLT



PA4343.472NLT

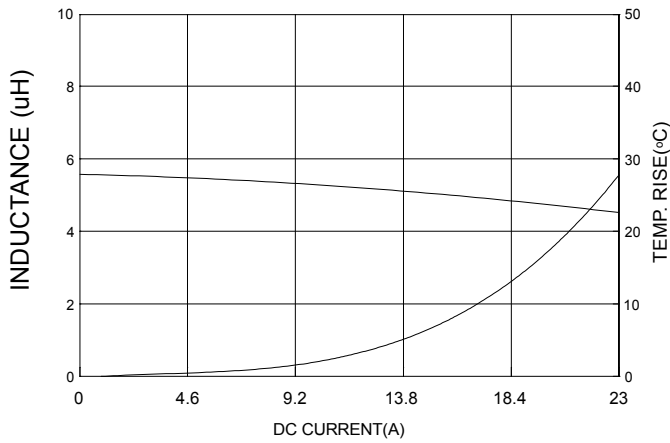


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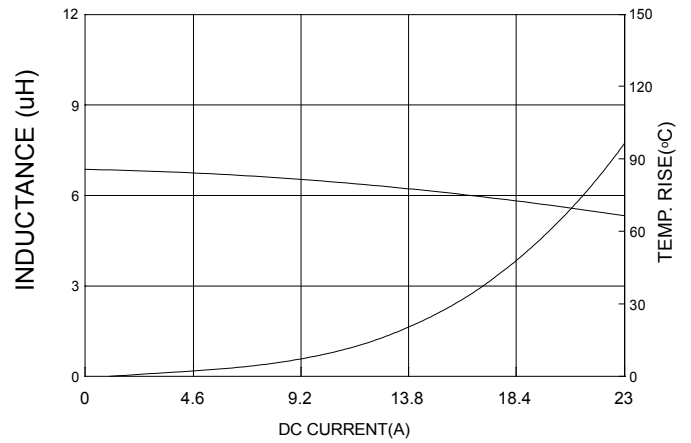
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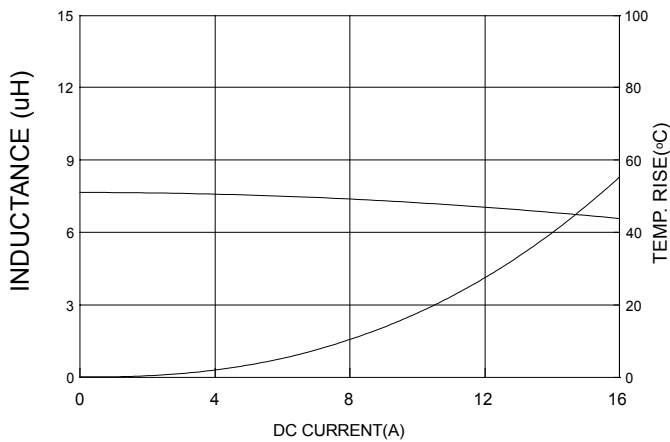
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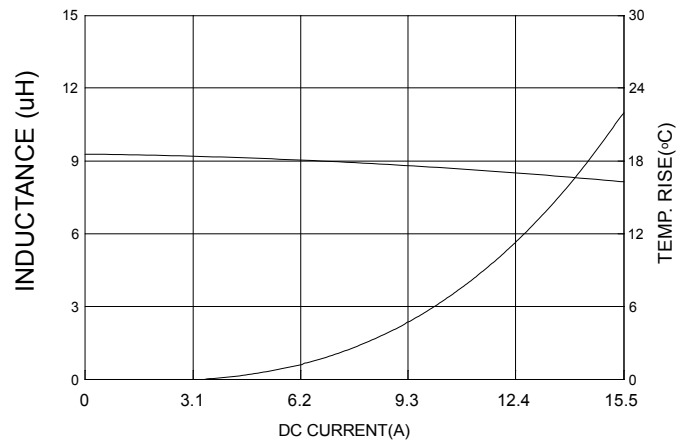
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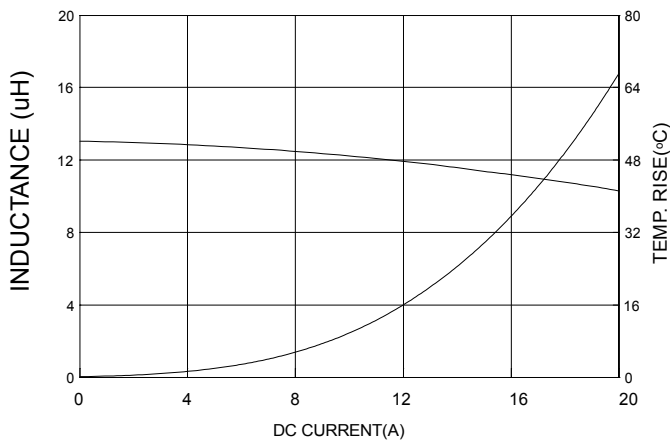
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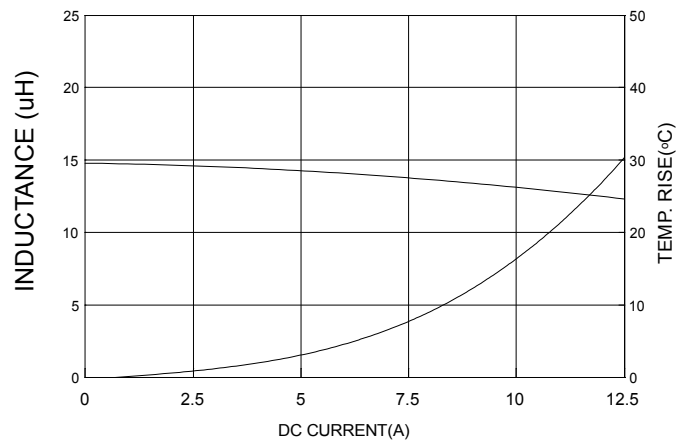
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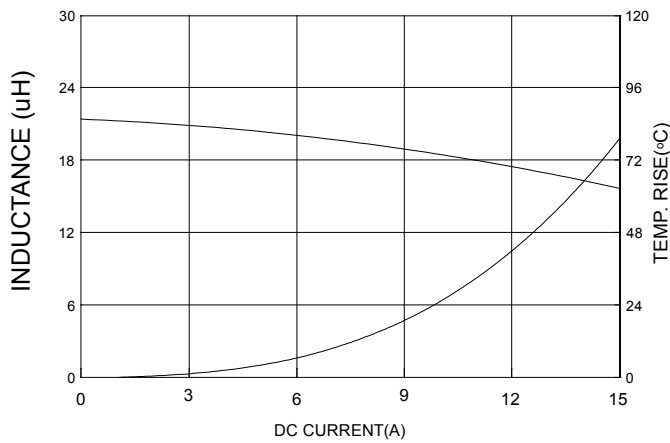
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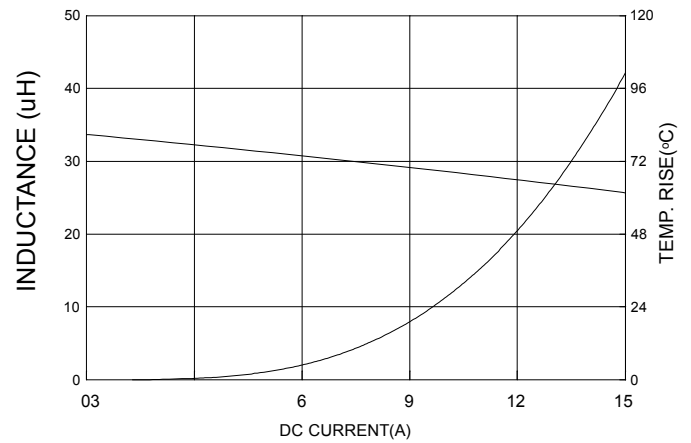
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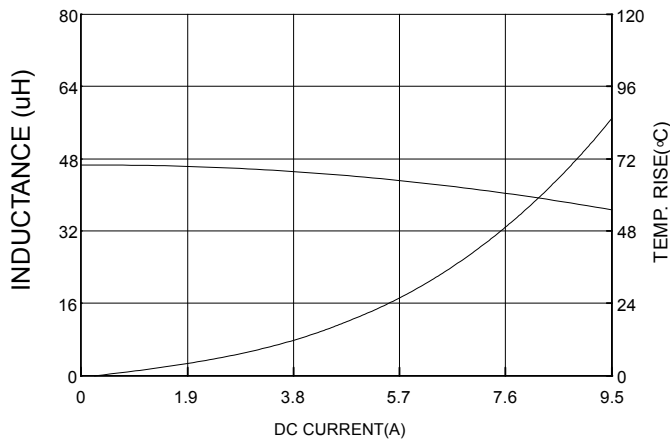
PA4343.223NLT



PA4343.333NLT



PA4343.473NLT



For More Information

Pulse Worldwide Headquarters

15255 Innovation Drive Ste 100
San Diego, CA 92128
U.S.A.

Pulse Europe

Pulse Electronics GmbH
Am Rottland 12
58540 Meinerzhagen
Germany

Pulse China Headquarters

Pulse Electronics (ShenZhen) CO., LTD
D708, Shenzhen Academy of
Aerospace Technology,
The 10th Keji South Road,
Nanshan District, Shenzhen, P.R.
China 518057

Pulse North China

Room 2704/2705
Super Ocean Finance Ctr.
2067 Yan An Road West
Shanghai 200336
China

Pulse South Asia

135 Joo Seng Road
#03-02
PM Industrial Bldg.
Singapore 368363

Pulse North Asia

1F, No.111
Xiyuan Road
Zhongli District
Taoyuan City 32057
Taiwan (R.O.C)

Tel: 858 674 8100
Fax: 858 674 8262

Tel: 49 2354 777 100
Fax: 49 2354 777 168

Tel: 86 755 33966678
Fax: 86 755 33966700

Tel: 86 21 62787060
Fax: 86 2162786973

Tel: 65 6287 8998
Fax: 65 6280 0080

Tel: 886 3 4356768
Fax: 886 3 4356820

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