High Current Molded Power Inductor - PA4342.XXXNLT Series











- Height: 4.0mm Max
- **Proofprint:** 11.5mm x 10.3mm Max
- Current Rating: up to 43.0A
- P Inductance Range: 0.15uH to 68.0uH
- 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 -40°C to +125°C											
	Inductance	Rated	Resi	Saturation Current	Mechanical						
Part	100KHz, 1V	Current	MAX.	TYP.	Max.						
Number	uH	A	mΩ	mΩ	A						
PA4342.151NLT	0.15±30%	43.0	0.6	0.5	75.0	Footprint 1					
PA4342.221NLT	0.22±20%	35.0	1.0	0.8	60.0	Footprint 1					
PA4342.271NLT	0.27 ± 20%	33.0	1.0	0.82	60.0	Footprint 1					
PA4342.361NLT	0.36 ± 20%	31.0	1.2	1.05	60.0	Footprint 1					
PA4342.391NLT	0.39 ± 20%	30.0	1.3	1.1	60.0	Footprint 1					
PA4342.451NLT	0.45 ± 20%	29.0	1.5	1.3	45.0	Footprint 1					
PA4342.471NLT	0.47 ± 20%	28.0	1.5	1.3	43.0	Footprint 1					
PA4342.561NLT	0.56 ± 20%	25.0	1.8	1.6	40.0	Footprint 1					
PA4342.681NLT	0.68 ± 20%	22.0	2.7	2.4	39.0	Footprint 1					
PA4342.102NLT	1.00 ± 20%	18.0	3.3	3.0	36.0	Footprint 1					
PA4342.122NLT	1.20 ± 20%	17.0	3.8	3.3	33.0	Footprint 1					
PA4342.152NLT	1.50 ± 20%	16.0	4.6	4.0	33.0	Footprint 2					
PA4342.222NLT	2.20 ± 20%	12.0	7.0	6.5	27.0	Footprint 2					
PA4342.252NLT	2.50 ± 20%	11.5	8.7	7.9	23.0	Footprint 2					
PA4342.332NLT	3.30 ± 20%	11.0	11.8	10.8	20.0	Footprint 2					
PA4342.402NLT	4.00±20%	10.2	15.0	13.0	18.0	Footprint 2					
PA4342.472NLT	4.70 ± 20%	10.0	15.5	15.0	17.0	Footprint 2					
PA4342.562NLT	5.60±20%	9.0	19.3	17.0	14.0	Footprint 2					
PA4342.682NLT	6.80±20%	8.5	23.3	17.5	13.5	Footprint 2					

USA 858 674 8100 Germany 49 2354 777 100 Singapore 65 6287 8998 Shanghai 86 21 62787060 China 86 755 33966678 Taiwan 886 3 4356768

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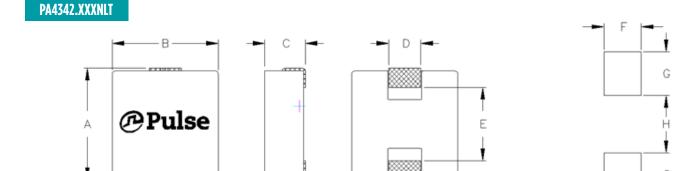


Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C												
	Inductance 100KHz, 1V	Rated Current	Resis	tance	Saturation Current Max.	Mechanical						
Part Number	uH	A	mΩ	mΩ	A	-						
PA4342.822NLT	8.20±20%	8.0	25.5	20.0	12.5	Footprint 2						
PA4342.103NLT	10.0 ± 20%	7.5	30.0	27.0	12.0	Footprint 2						
PA4342.153NLT	15.0±20%	6.25	45.0	40.0	10.0	Footprint 2						
PA4342.223NLT	22.0±20%	5.0	74.0	64.0	7.0	Footprint 2						
PA4342.273NLT	27.0±20%	4.0	100.0	86.0	6.0	Footprint 2						
PA4342.333NLT	33.0±20%	3.5	112.0	92.0	5.0	Footprint 2						
PA4342.473NLT	47.0±20%	3.0	167.0	145.0	4.5	Footprint 2						
PA4342.683NLT	68.0±20%	2.0	240.0	205.0	3.0	Footprint 2						

Notes:

- 1. Actual temperature of the component during system operation (ambient plus tempera- 3. The rated current is the DC current required to raise the component temperature by ture rise) must be within the standard operating range.
- 2. 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 cur- 4. The part temperature (ambient+temp rise) should not exceed 125°C under worst case rent (to eliminate self-heating effect) to the component.
- 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.
 - 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



Final Layout

F	G	Н
(7.0)	(4.1)	(E A)

SUGGESTED PAD LAYOUT

Series	Mechanical	A	В	C	D	E	F	G	Н
PA4342.XXXNLT	Footprint 1	11.5 Max	10.3 Max	4.0 Max	(2.5)	(6.4)	(3.0)	(4.1)	(5.4)
PA4342.XXXNLT	Footprint 2	11.5 Max	10.3 Max	4.0 Max	(3.0)	(6.4)	(3.5)	(4.1)	(5.4)

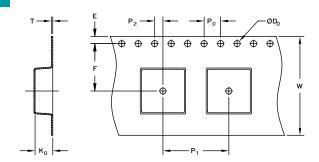
All Dimensions in mm.

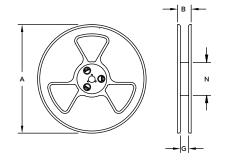
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TAPE & REEL INFO

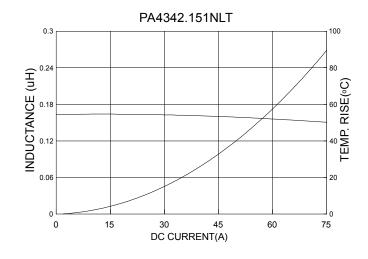


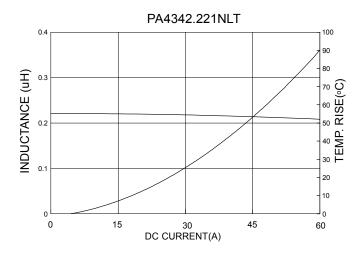


SURFACE MOUNTING TYPE, REEL/TAPE LIST														
		REEL S	IZE (mm)		TAPE SIZE (mm)									QTY
	A	В	G	N	E	F	D _o	P ₁	P _o	P ₂	W	T	K _o	PCS/REEL
PA4342.XXXNLT	Ø330	N/A	24	100	1.75	11.5	1.5	16	4	2	24	0.35	4.5	500

Typical Performance Curves

3



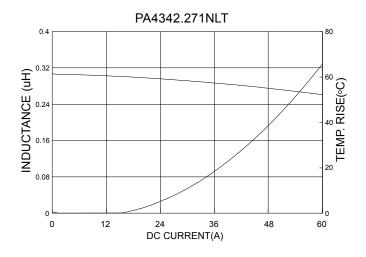


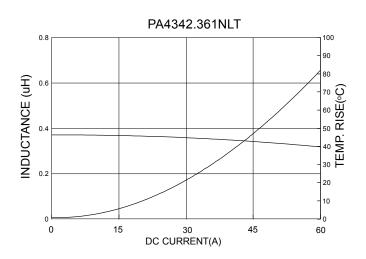
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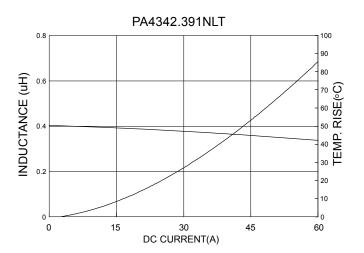
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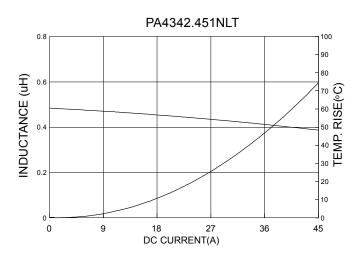
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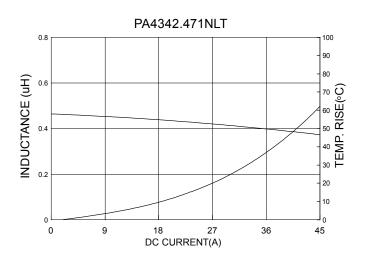
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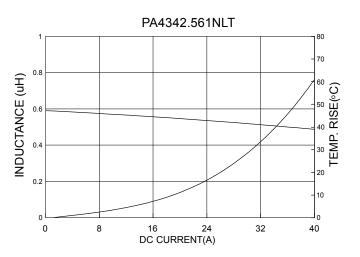










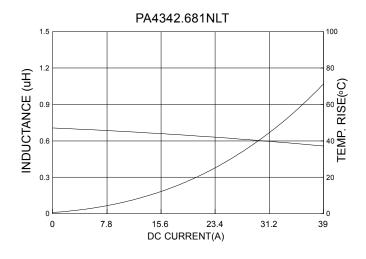


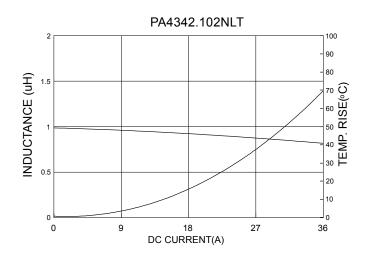


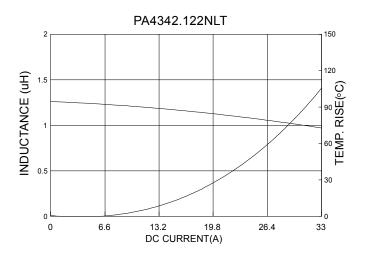
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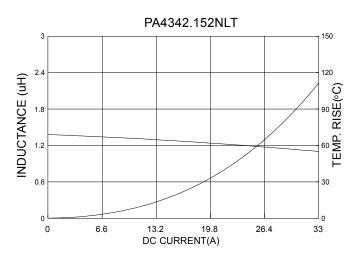
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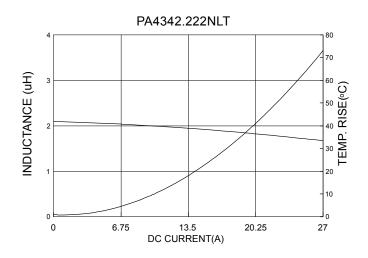
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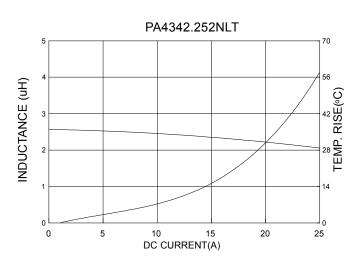








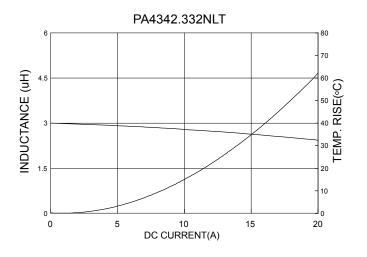
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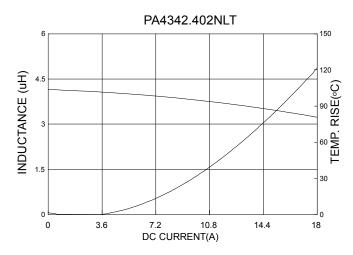


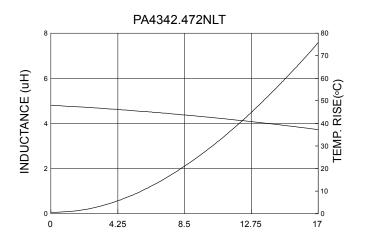
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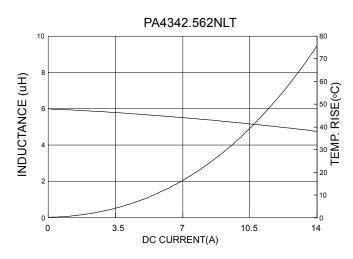
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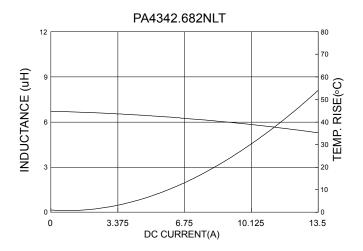
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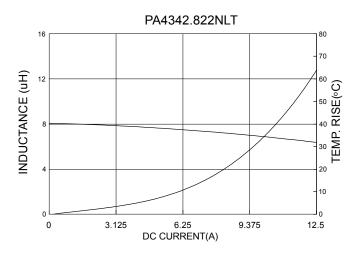








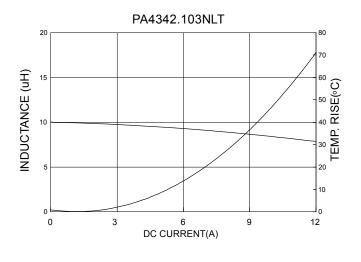


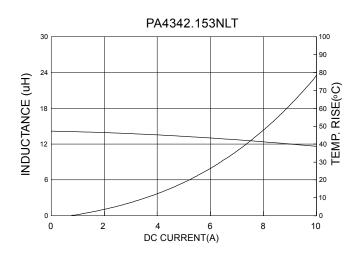


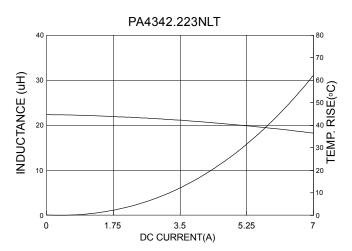
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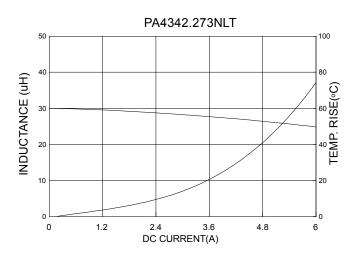
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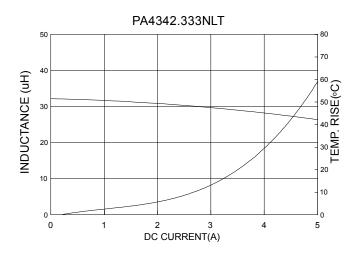
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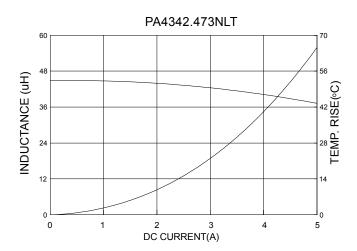








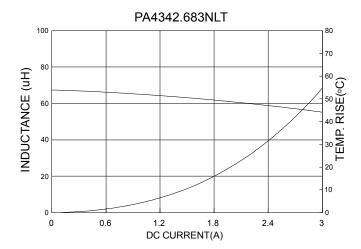




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