High Current Molded Power Inductor - PA4342.XXXNLT Series





- *P* Height: 4.0mm Max
- *•* **Footprint:** 11.5mm x 10.3mm Max
- *Current Rating:* up to 43.0A
- *P* Inductance Range: 0.15uH to 68.0uH
- *P* Shielded construction and compact design
- *P* High current, low DCR, and high efficiency
- *P* 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			DC istance	Saturation Current	Mechanical		
Part	100KHz, 1V	Current	MAX.	TYP.	Max.			
Number	uH	Α	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

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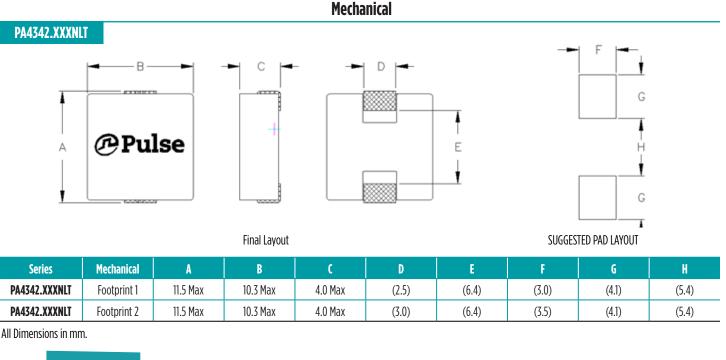
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Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C									
	Inductance	Rated	D Resis	C tance	Saturation Current	Mechanical			
Part	100KHz, 1V	Current	MAX.	TYP.	Max.				
Number	uH	A	mΩ	mΩ	Α				
PA4342.822NLT	8.20±20%	8.0	25.5	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:

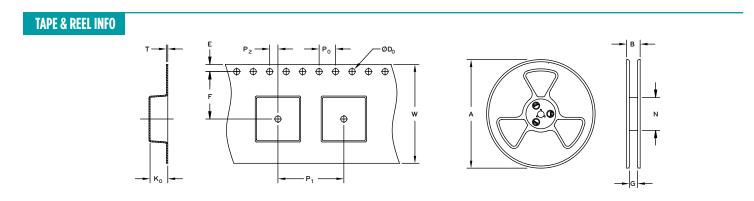
- 1. Actual temperature of the component during system operation (ambient plus tempera- 3. The rated current is the DC current required to raise the component temperature by approximately 40°C. Take note that the components' performanc varies depending
- The saturation current is the current at which 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. rent (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' 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.
- In 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.



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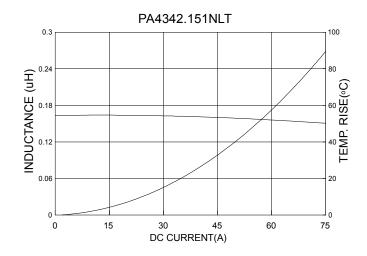
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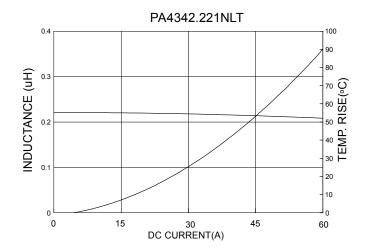
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SURFACE MOUNTING TYPE, REEL/TAPE LIST														
		REEL S	IZE (mm)		TAPE SIZE (mm)						QTY			
	A	В	G	N	E	F	D ₀	P ₁	Po	P ₂	W	T	K _o	PCS/REEL
PA4342.XXXNLT	Ø 330	N/A	24	100	1.75	11.5	1.5	16	4	2	24	0.35	4.5	500

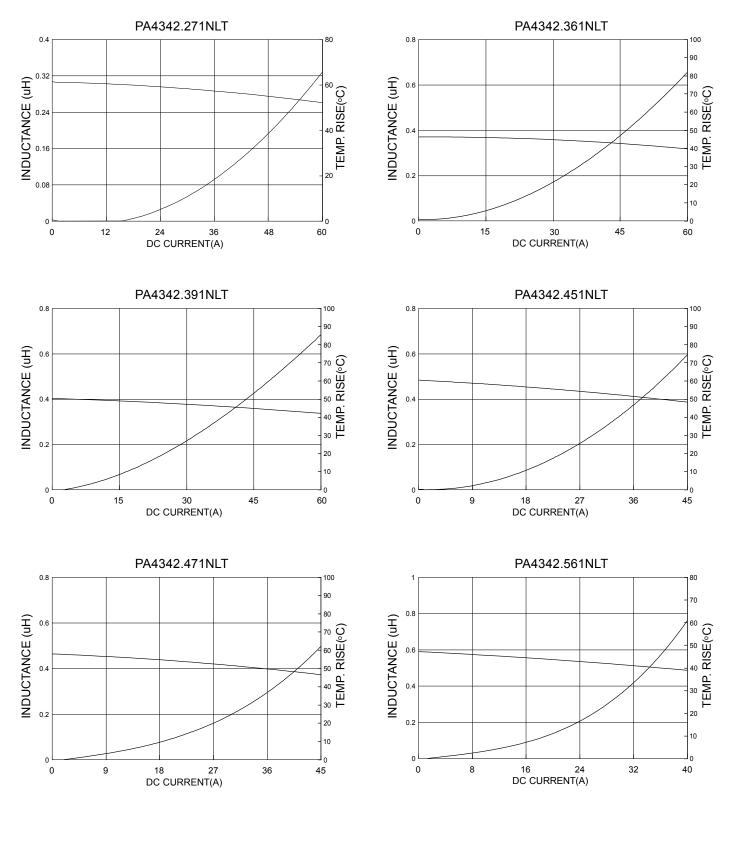
Typical Performance Curves







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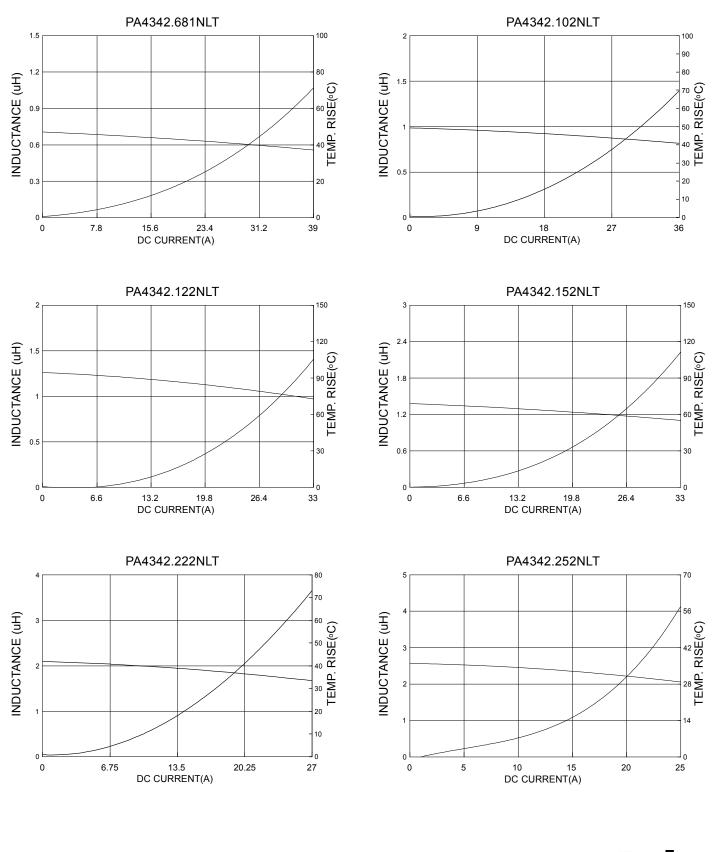




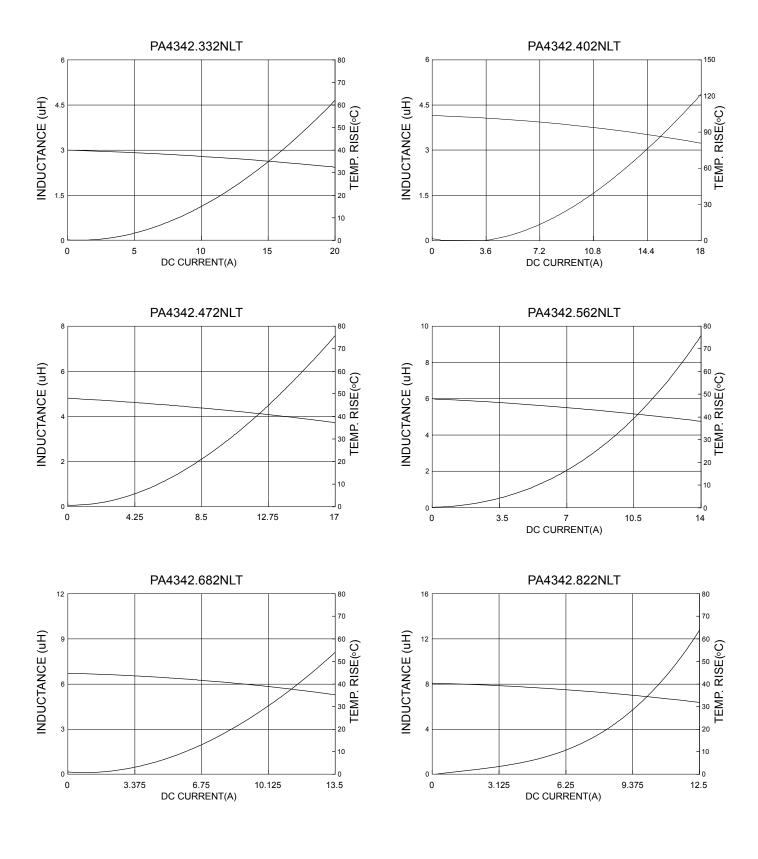
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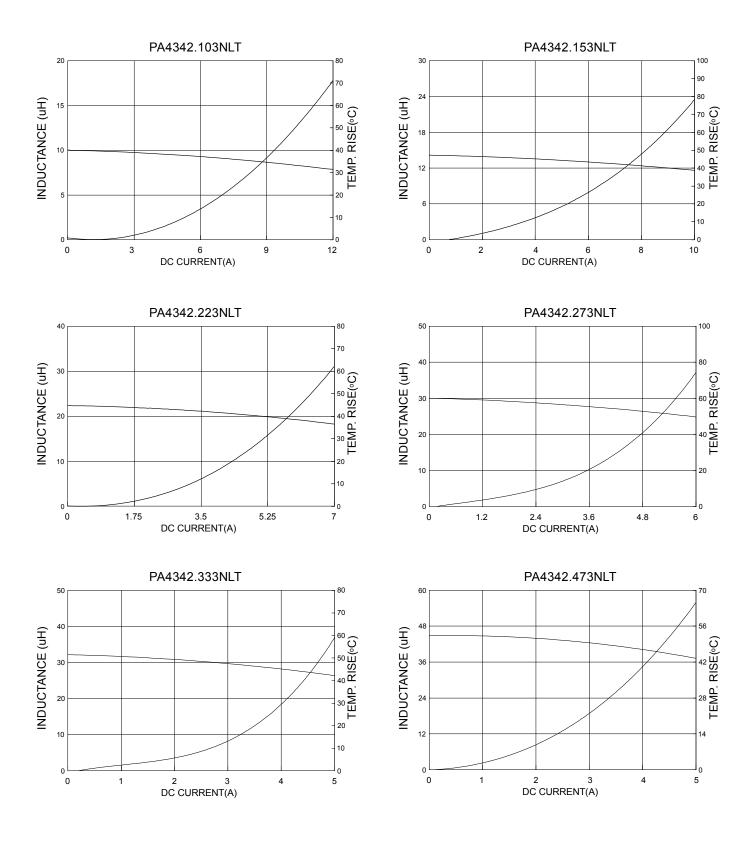




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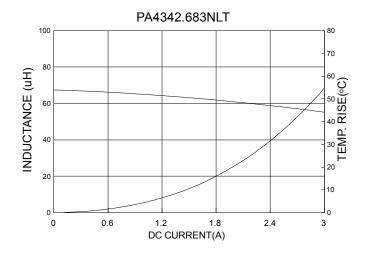
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For More Information **Pulse Worldwide Pulse Europe Pulse South Asia Pulse China Headquarters Pulse North China Pulse North Asia** Headquarters Pulse Electronics GmbH B402. Shenzhen Academy of Room 2704/2705 135 Joo Seng Road 3F. No. 198 15255 Innovation Drive Ste 100 #03-02 Zhongyuan Road Am Rottland 12 Aerospace Technology Bldg. Super Ocean Finance Ctr. San Diego, CA 92128 58540 Meinerzhagen 10th Kejinan Road 2067 Yan An Road West PM Industrial Bldg. Zhongli City U.S.A. High-Tech Zone Shanghai 200336 Singapore 368363 Germany

Tel: 858 674 8100 Fax: 858 674 8262

Tel: 49 2354 777 100

Fax: 49 2354 777 168

Nanshan District Shenzhen, PR China 518057

Tel: 86 755 33966678 Fax: 86 755 33966700 China

Tel: 86 21 62787060

Fax: 86 2162786973

Taoyuan County 320 Taiwan R. O. C.

Tel: 65 6287 8998 Fax: 65 6287 8998 Tel: 886 3 4356768 Fax: 886 3 4356823 (Pulse) Fax: 886 3 4356820 (FRE)

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