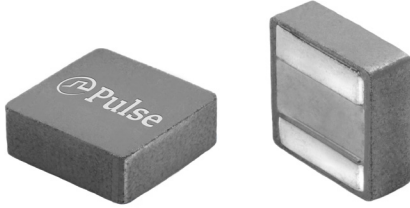


SMT Power Inductor

High Current Molded Power Inductor - PA5004.XXXNLT Series



- Height:** 3.1mm Max
- Footprint:** 6.8mm x 6.6mm Max
- Current Rating:** up to 40A_{pk}
- Inductance Range:** 0.18 μ H to 4.5 μ H
- High current, low DCR, and high efficiency
- High reliability
- Minimized acoustic noise and minimized leakage flux noise

Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C

Part Number	Inductance 100KHz, 0.1V μ H $\pm$ 20%	Rated Current A	DC Resistance		Saturation Current (25°C) A	Mechanical D $\pm$ 0.3
			TYP.	MAX.		
			m Ω	m Ω		
PA5004.181NLT	0.18	32.0	1.60	1.75	40	5.30
PA5004.331NLT	0.33	25.0	2.25	2.50	32	5.55
PA5004.561NLT	0.56	22.0	3.00	3.31	29	5.30
PA5004.102NLT	1.00	18.0	5.50	6.05	23	5.20
PA5004.122NLT	1.20	16.0	6.70	7.40	22	5.15
PA5004.182NLT	1.80	14.0	9.20	10.2	18.2	5.10
PA5004.222NLT	2.20	10.0	11.0	12.2	15.9	5.05
PA5004.332NLT	3.30	8.00	18.8	20.8	12.2	5.00
PA5004.452NLT	4.50	7.00	23.0	25.3	10	5.00

Notes:

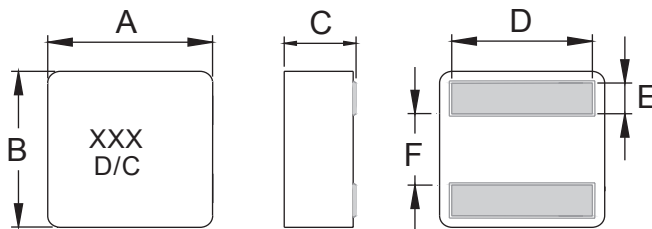
- Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
- The saturation current is the current at which the initial inductance drops approximately 30% at the stated ambient temperature. This current is determined by placing 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.

SMT Power Inductor

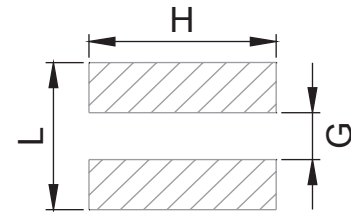
High Current Molded Power Inductor - PA5004.XXXNLT Series

Mechanical

PA5004.XXXNLT



FINAL LAYOUT

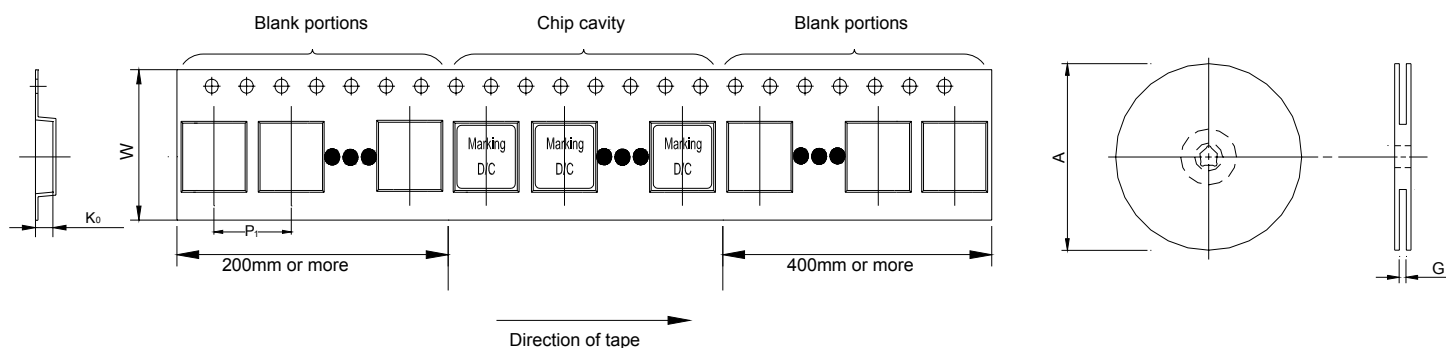


SUGGESTED PAD LAYOUT

Series	Mechanical	A	B	C	D	E	F	L	G	H
PA5004.XXXNLT	1.2uH & below	6.8±0.2	6.4±0.2	2.8±0.2	See Spec table	1.4±0.2	2.6±0.25	5.6 (REF)	2.5 (REF)	5.6 (REF)
PA5004.XXXNLT	1.5uH & above			2.9±0.2						

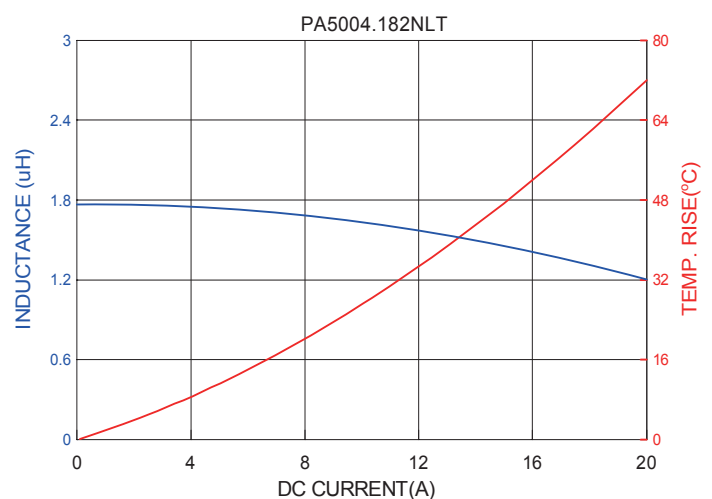
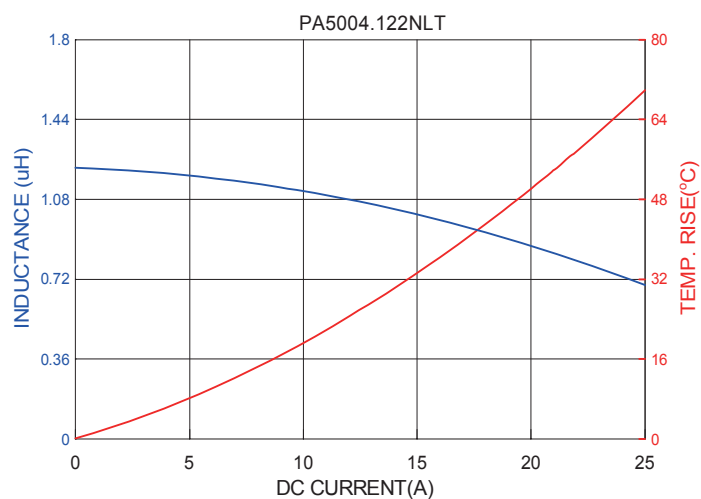
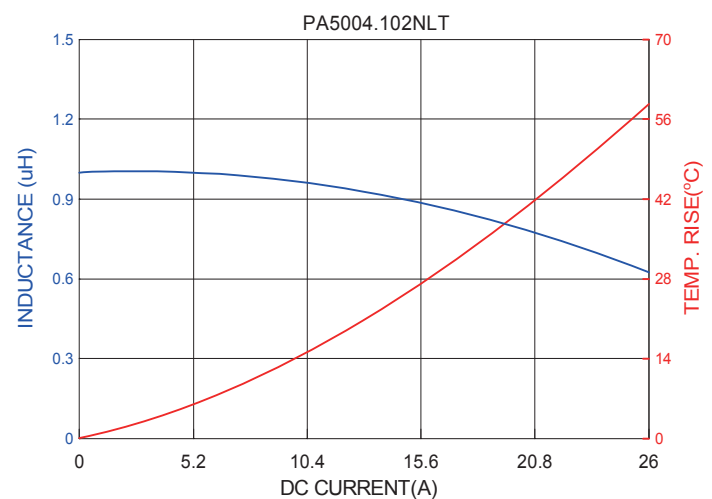
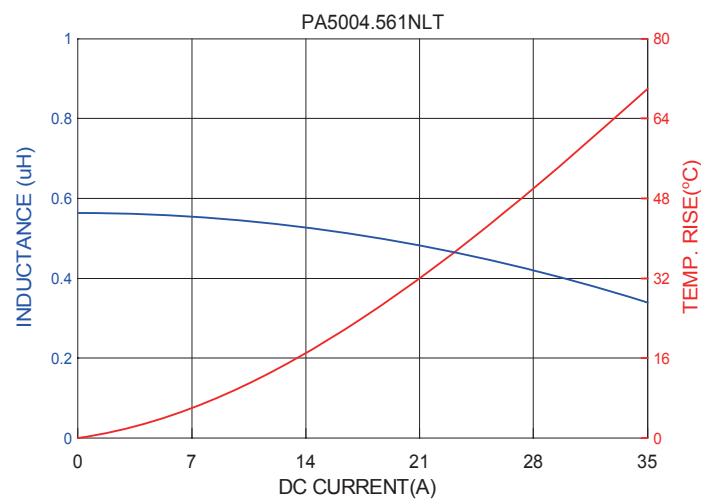
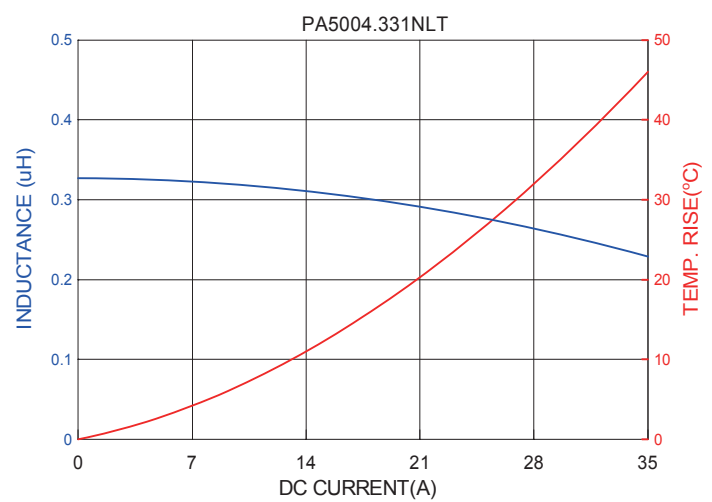
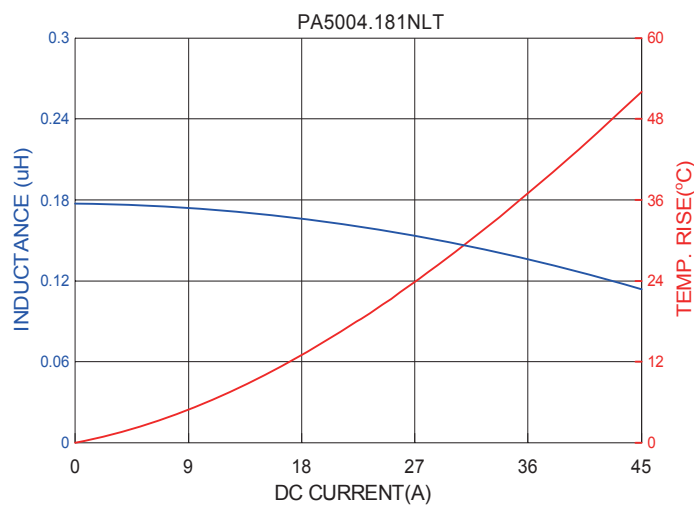
All Dimensions in mm.

TAPE & REEL INFO



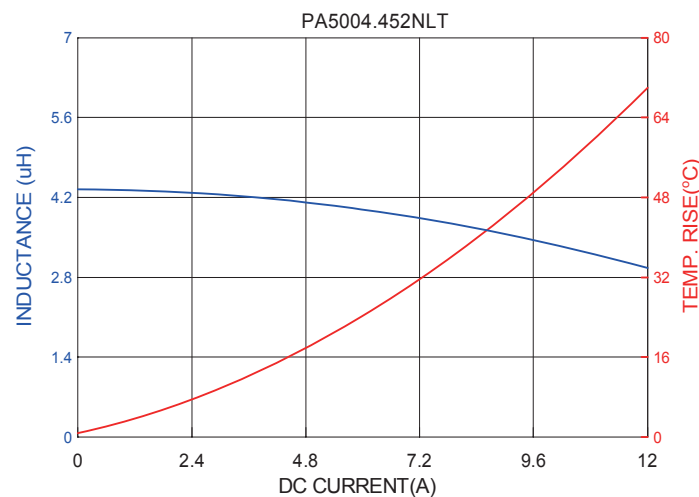
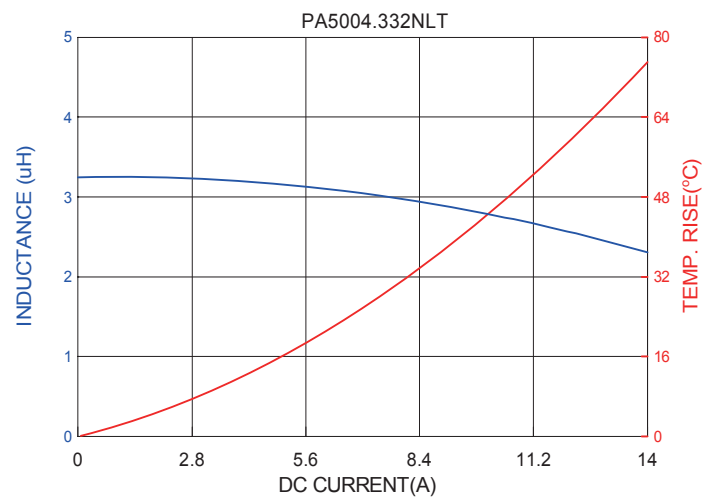
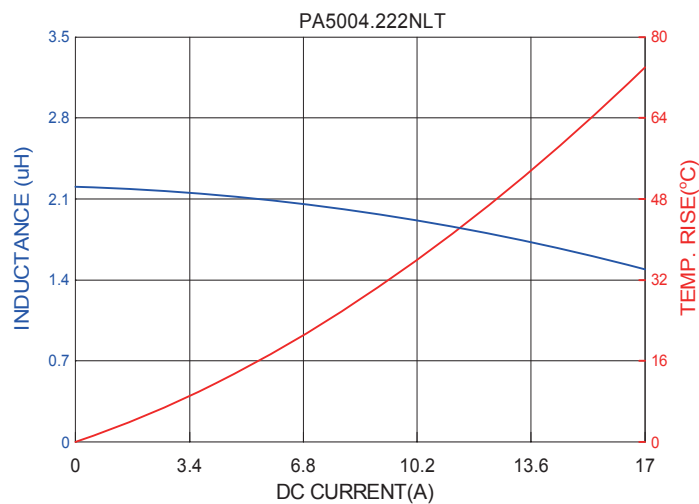
SURFACE MOUNTING TYPE, REEL/TAPE LIST						
	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P ₁	W	K ₀	PCS/REEL
PA5004.XXXNLT	Ø330	16.4	12	16	3.3	1000

Typical Performance Curves



SMT Power Inductor

High Current Molded Power Inductor - PA5004.XXXNLT Series



For More Information

Pulse Worldwide Headquarters

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

Tel: 858 674 8100
Fax: 858 674 8262

Pulse Europe

Pulse Electronics GmbH
Am Rottland 12
58540 Meinerzhagen
Germany

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

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

Tel: 86 755 33966678
Fax: 86 755 33966700

Pulse North China

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

Tel: 86 21 62787060
Fax: 86 2162786973

Pulse South Asia

3 Fraser Street
0428 DUO Tower
Singapore 189352

Tel: 65 6287 8998
Fax: 65 6280 0080

Pulse North Asia

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

Tel: 886 3 4356768
Fax: 886 3 4356820

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2018. Pulse Electronics, Inc. All rights reserved.