

SMT Power Inductor

High Current Molded Power Inductor - PA4341.XXXNLT Series



- Height: 3.0mm Max
- Footprint: 7.6mm x 6.9mm Max
- Current Rating: up to 32.5A
- Inductance Range: 0.1uH 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 ⁵ 100KHz, 1V (uH ±20%)	Rated Current A	DC Resistance		Saturation Current Max. A
			MAX.	TYP.	
			mΩ	mΩ	
PA4341.101NLT	0.10*	32.5	1.7	1.2	60.0
PA4341.151NLT	0.15*	27.0	1.9	1.5	45.0
PA4341.161NLT	0.16*	27.0	1.9	1.5	45.0
PA4341.201NLT	0.20*	24.0	2.5	1.8	41.0
PA4341.221NLT	0.22	23.0	2.8	2.1	40.0
PA4341.301NLT	0.30	21.0	3.8	3.2	35.0
PA4341.331NLT	0.33	20.0	3.9	3.5	32.0
PA4341.361NLT	0.36	19.0	4.2	3.6	32.0
PA4341.471NLT	0.47	17.5	4.2	4.0	26.0
PA4341.561NLT	0.56	16.5	5.0	4.7	25.5
PA4341.601NLT	0.60	16.0	5.2	4.7	25.5
PA4341.681NLT	0.68	15.5	5.5	4.8	25.0
PA4341.751NLT	0.75	14.5	6.6	5.5	24.5
PA4341.821NLT	0.82	13.0	8.0	6.7	24.0
PA4341.102NLT	1.0	11.0	10.0	8.3	22.0
PA4341.122NLT	1.2	10.0	12.0	10.0	20.0
PA4341.152NLT	1.5	9.0	15.0	13.0	18.0
PA4341.182NLT	1.8	8.5	17.0	14.0	16.0
PA4341.202NLT	2.0	8.2	19.0	16.0	15.0

SMT Power Inductor

High Current Molded Power Inductor - PA4341.XXXNLT Series

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

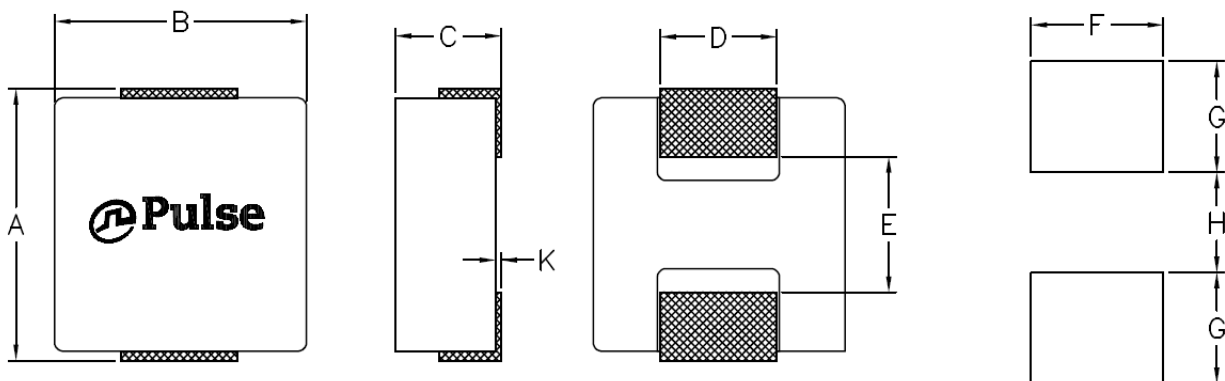
Part Number	Inductance ⁵ 100KHz, 1V ($\mu\text{H} \pm 20\%$)	Rated Current A	DC Resistance		Saturation Current Max. A
			MAX.	TYP.	
			m Ω	m Ω	
PA4341.222NLT	2.2	8.0	20.0	18.0	14.0
PA4341.252NLT	2.5	7.0	22.0	20.0	13.0
PA4341.332NLT	3.3	6.0	30.0	28.0	13.5
PA4341.472NLT	4.7	5.5	40.0	37.0	10.0
PA4341.562NLT	5.6	5.0	48.0	43.0	9.0
PA4341.682NLT	6.8	4.5	60.0	54.0	8.0
PA4341.822NLT	8.2	4.0	68.0	64.0	7.5
PA4341.103NLT	10.0	3.5	85.0	75.0	6.0
PA4341.123NLT	12.0	3.3	93.0	81.0	5.5
PA4341.223NLT	22.0	2.0	190.0	165.0	3.5
PA4341.473NLT	47.0	1.75	363.0	302.0	2.0

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.
- Please note that the inductance tolerance is $\pm 20\%$ for all parts except PA4341.101NLT, PA4341.151NLT, PA4341.161NLT, and PA4341.201NLT 's tolerance is $\pm 30\%$.

Mechanical

PA4341.XXXNLT



FINAL LAYOUT

SUGGESTED PAD LAYOUT

SMT Power Inductor

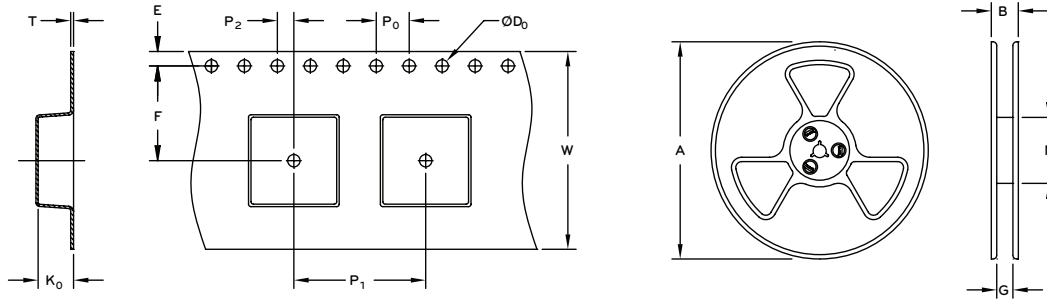
High Current Molded Power Inductor - PA4341.XXXNLT Series



Series	A	B	C	D	E	F	G	H	K
PA4341.XXXNLT	7.6 MAX	6.9 MAX	3.0 MAX	(3.0)	(3.7)	(3.5)	(2.95)	(2.5)	(0-0.22)

All Dimensions in mm.

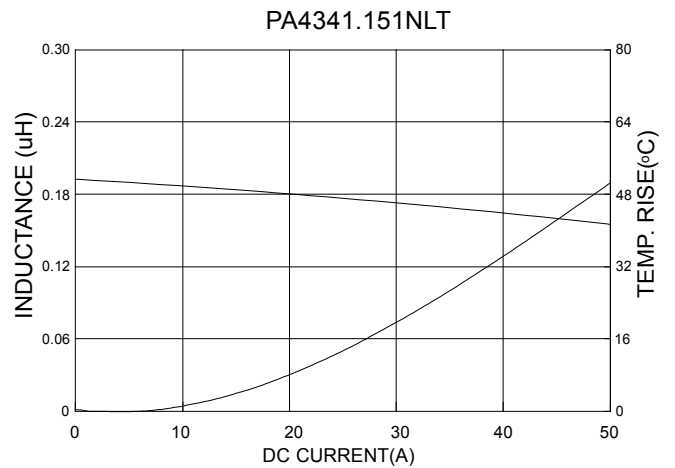
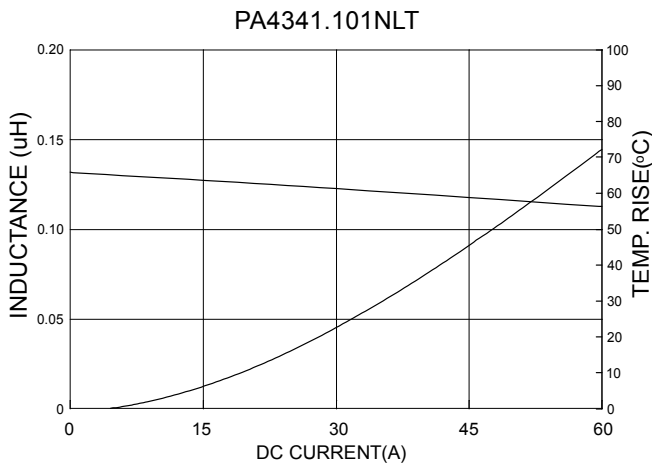
TAPE & REEL INFO



SURFACE MOUNTING TYPE, REEL/TAPE LIST

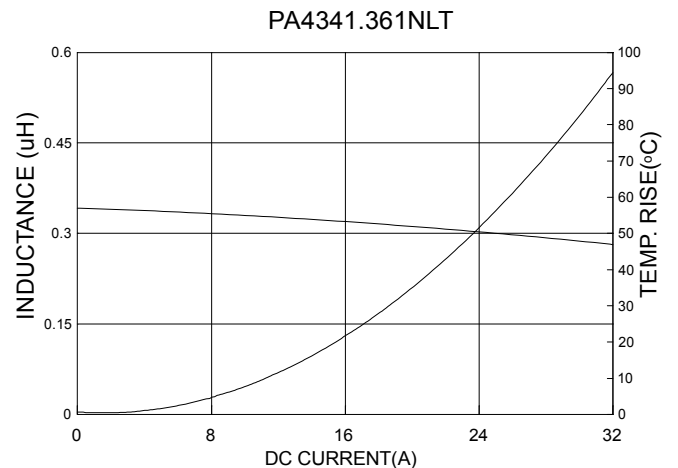
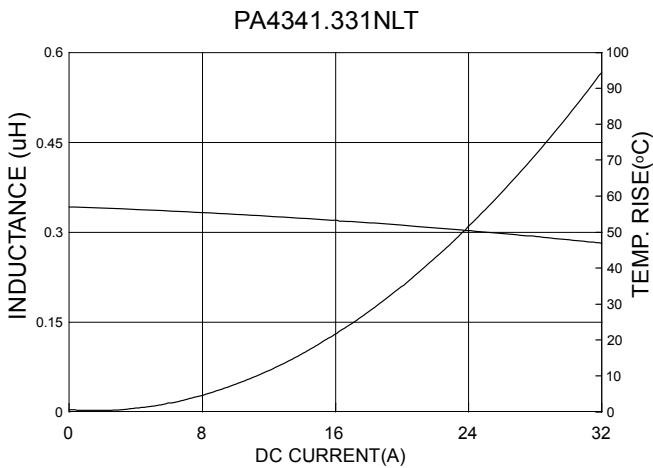
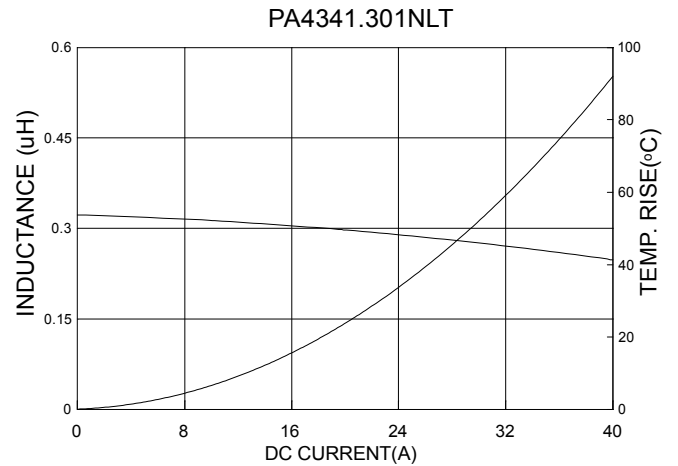
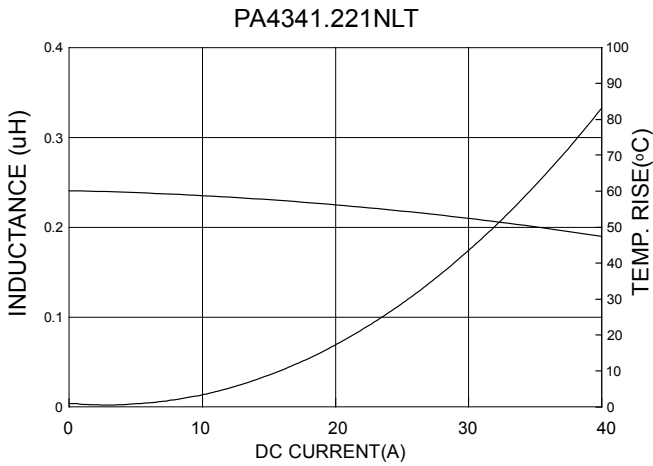
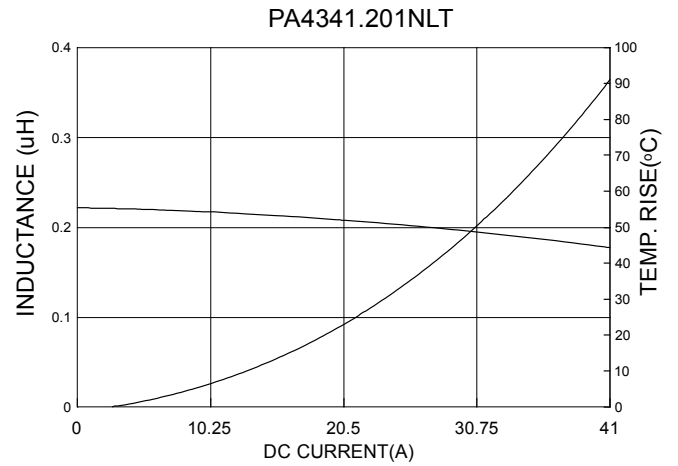
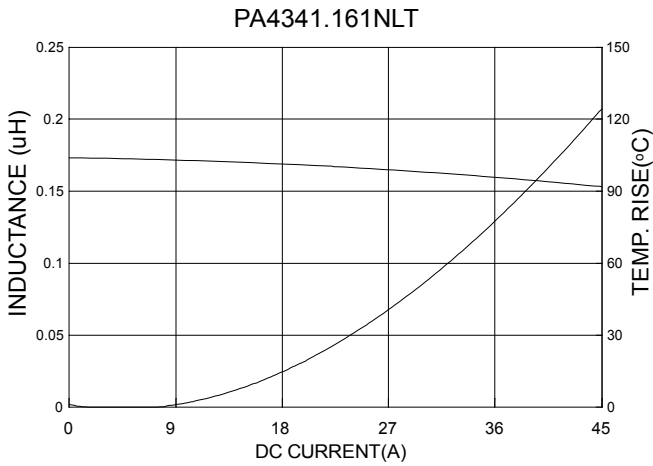
	REEL SIZE (mm)				TAPE SIZE (mm)									QTY
	A	B	G	N	E	F	D ₀	P ₁	P ₀	P ₂	W	T	K ₀	PCS/REEL
PA4341.XXXNLT	∅330	N/A	16	100	1.75	7.5	1.5	12	4	2	16	0.35	3.3	1000

Typical Performance Curves



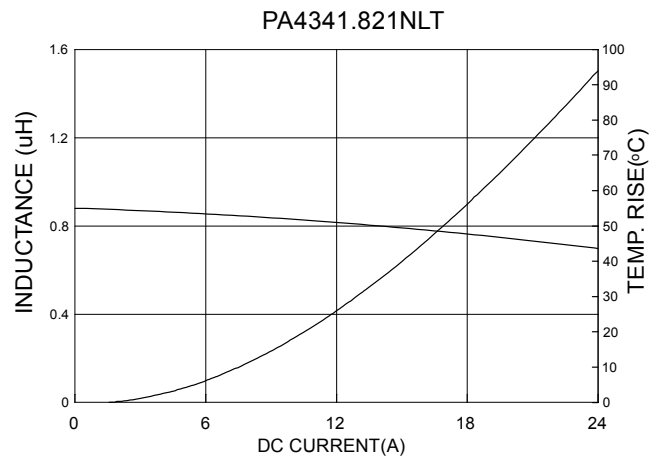
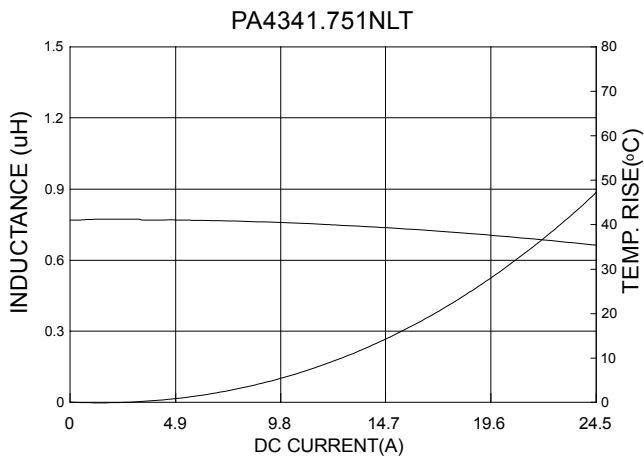
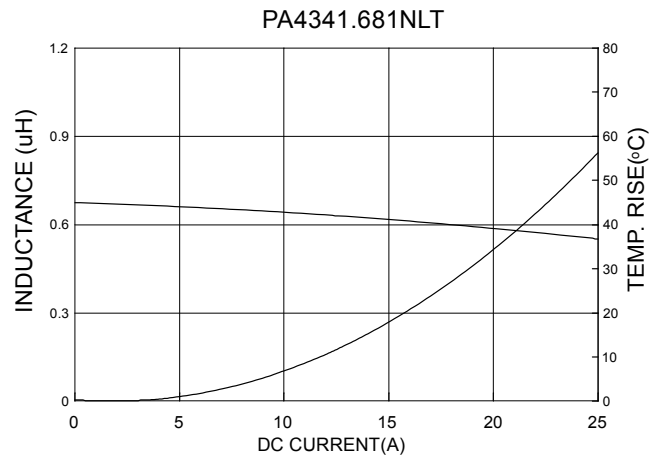
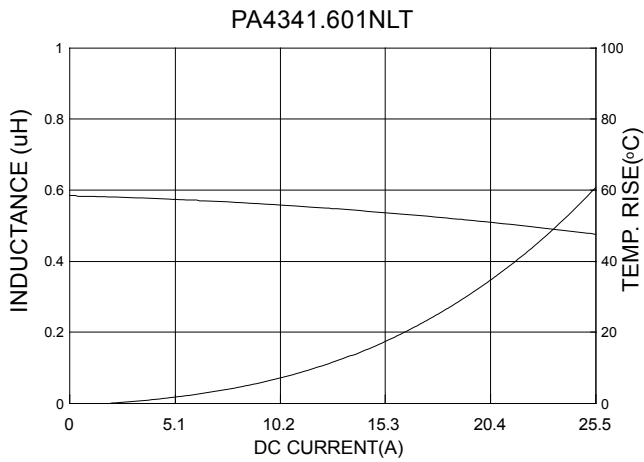
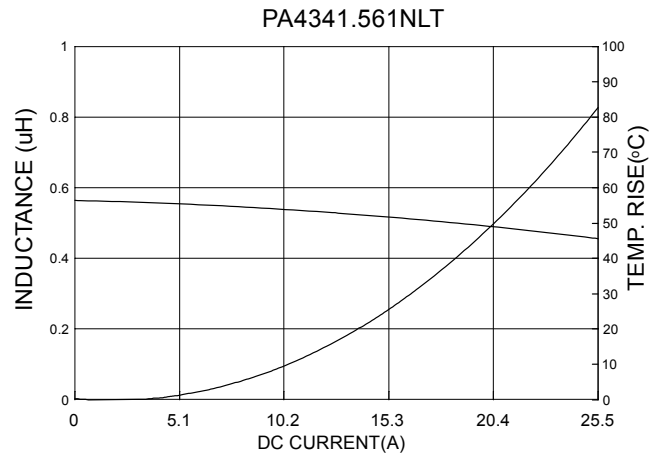
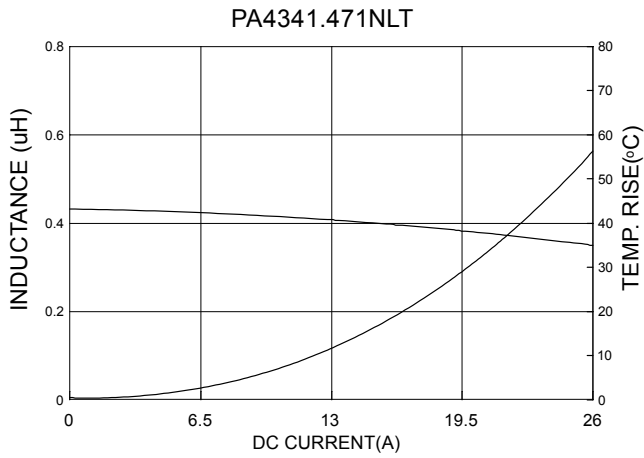
SMT Power Inductor

High Current Molded Power Inductor - PA4341.XXXNLT Series



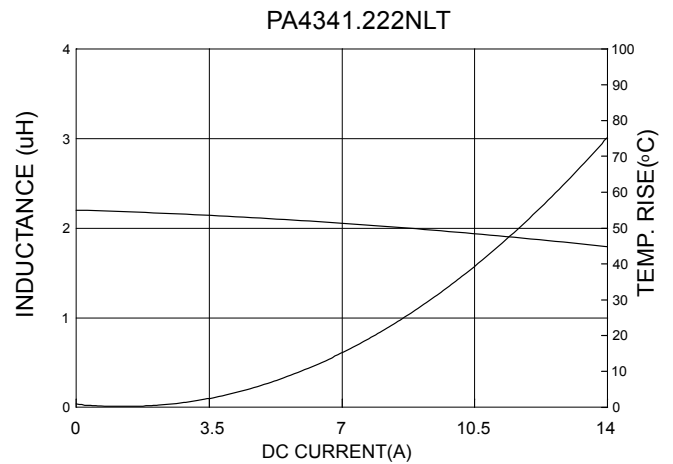
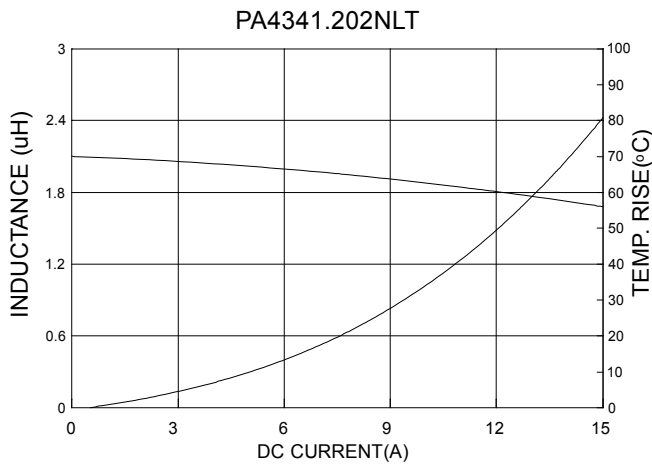
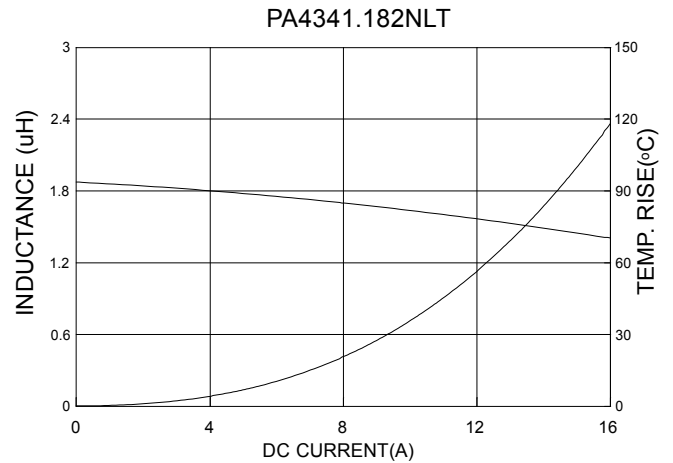
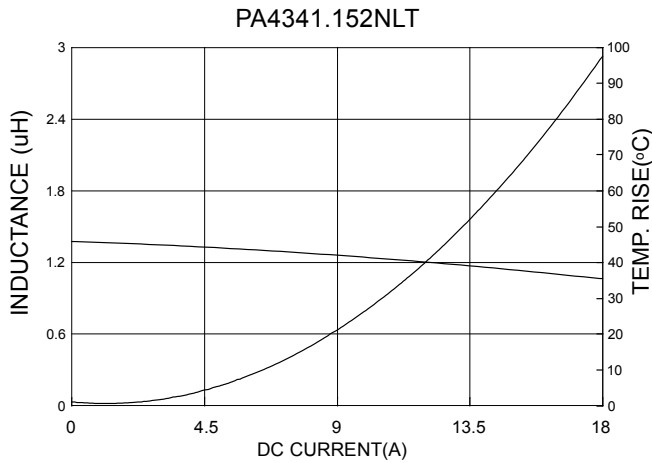
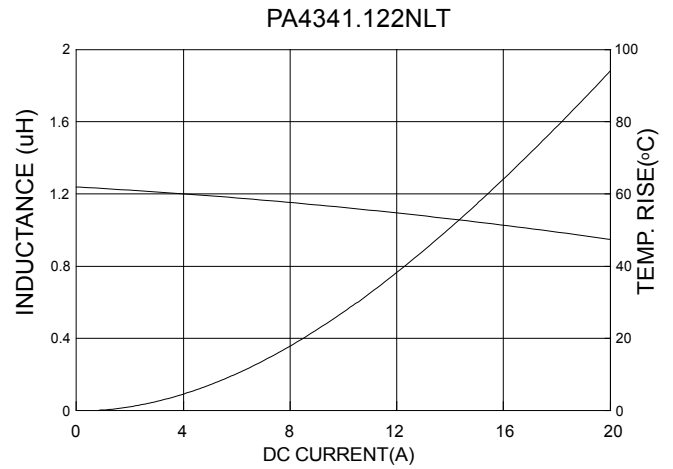
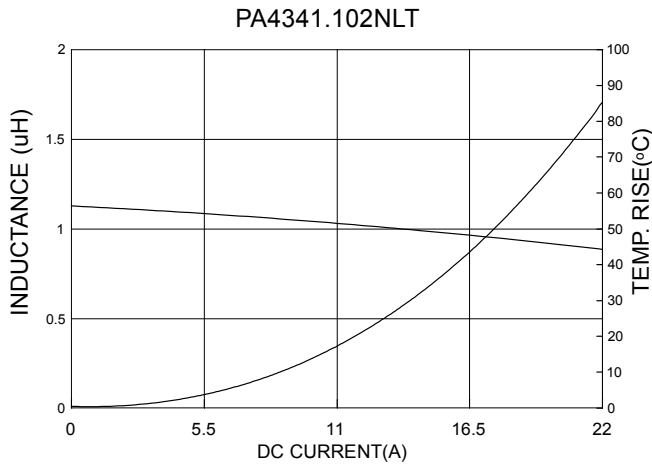
SMT Power Inductor

High Current Molded Power Inductor - PA4341.XXXNLT Series



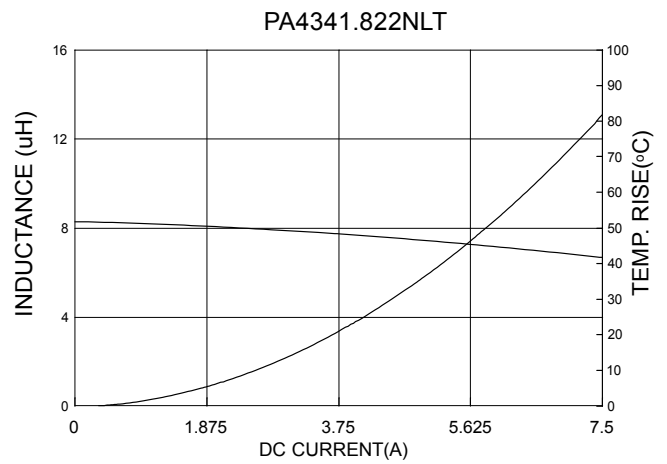
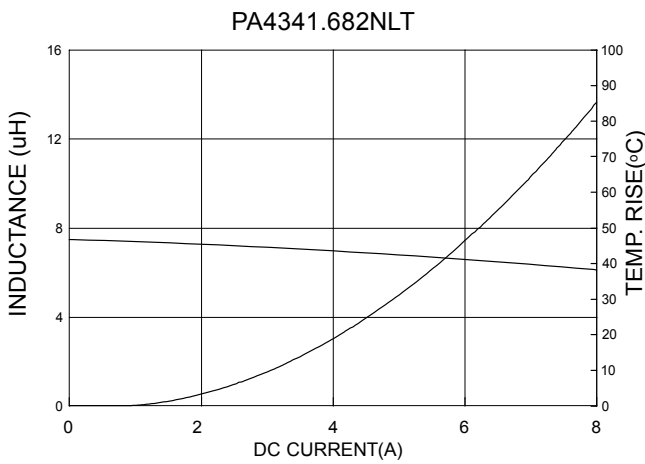
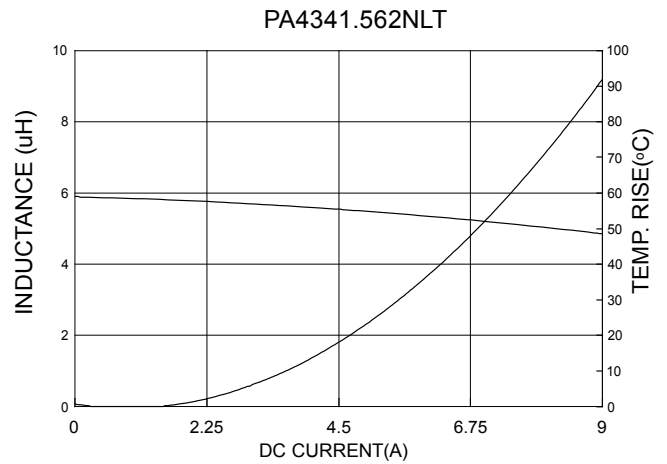
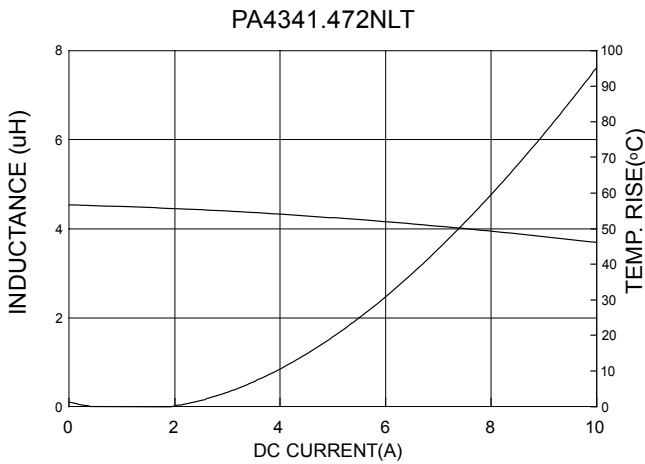
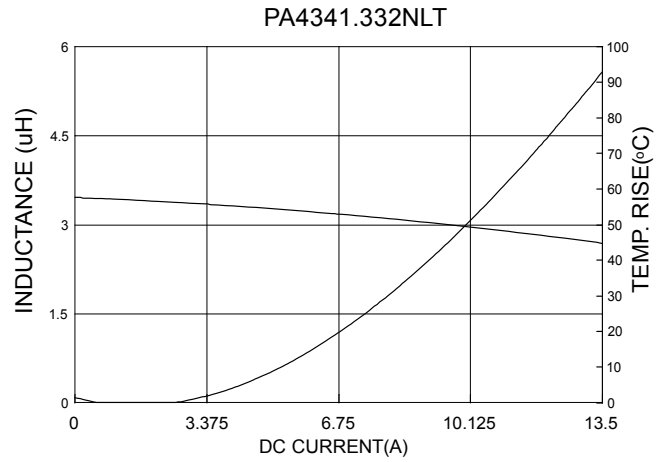
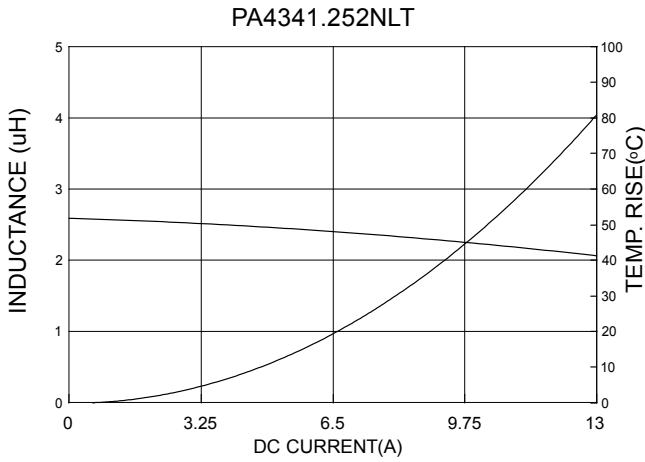
SMT Power Inductor

High Current Molded Power Inductor - PA4341.XXXNLT Series



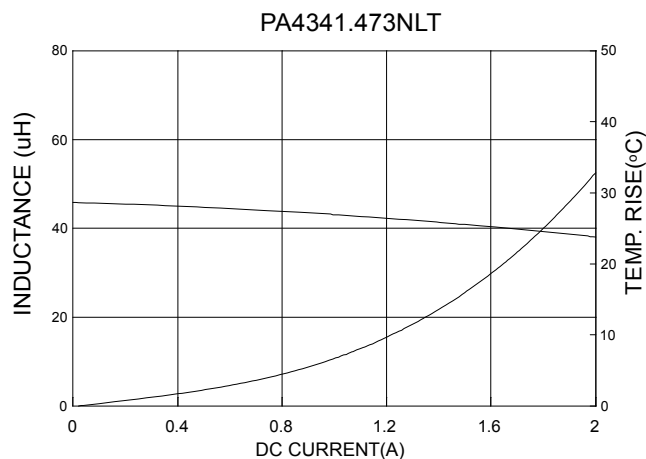
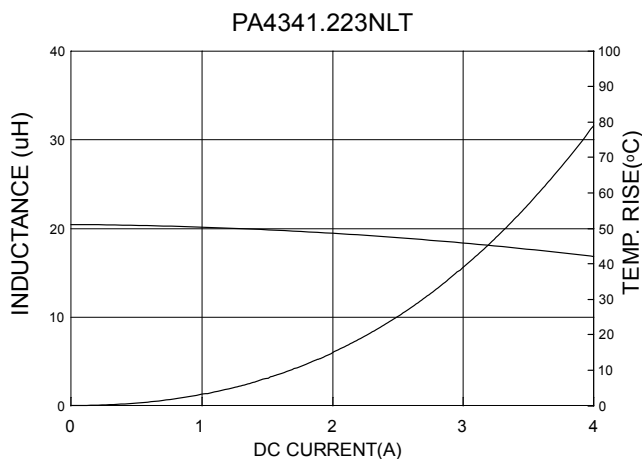
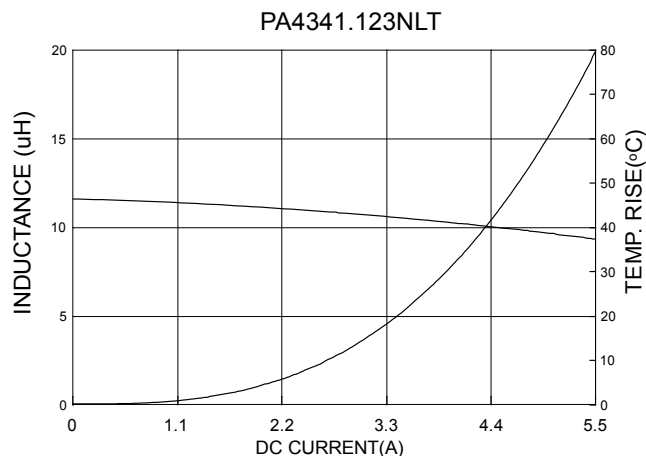
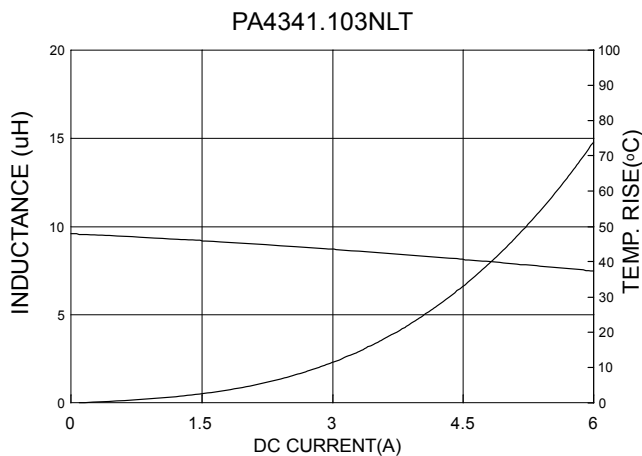
SMT Power Inductor

High Current Molded Power Inductor - PA4341.XXXNLT Series



SMT Power Inductor

High Current Molded Power Inductor - PA4341.XXXNLT Series



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

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, 2017. Pulse Electronics, Inc. All rights reserved.