

SMT Power Inductors

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 -40°C to +125°C

Part Number ⁶	Inductance ⁵ 100KHz, 1V uH±20%	Rated Current A	DC Resistance		Saturation Current A	Mechanical
			TYP.	MAX.		
			mΩ	mΩ		
PA4343.151NLT	0.15*	55	0.49	0.6	118	Footprint 1
PA4343.221NLT	0.22	53	0.47	0.6	112	Footprint 1
PA4343.301NLT	0.3	48	0.6	0.72	72	Footprint 1
PA4343.331NLT	0.33	46	0.65	0.8	68	Footprint 1
PA4343.361NLT	0.36	45	0.7	0.9	66	Footprint 1
PA4343.401NLT	0.4	44	0.7	1	64	Footprint 1
PA4343.451NLT	0.45	42	0.9	1.2	63	Footprint 1
PA4343.471NLT	0.47	41	0.9	1.2	63	Footprint 1
PA4343.501NLT	0.5	40	0.92	1.25	60	Footprint 1
PA4343.561NLT	0.56	37	1.05	1.2	58	Footprint 1
PA4343.681NLT	0.68	35	1.25	1.5	55	Footprint 1
PA4343.821NLT	0.82	33	1.5	1.9	50	Footprint 1
PA4343.102NLT	1	30	1.7	2.3	48	Footprint 1
PA4343.142NLT	1.4	27	2.1	2.6	46	Footprint 1
PA4343.152NLT	1.5	27	2.5	3	45	Footprint 1
PA4343.182NLT	1.8	27	3.6	4	40	Footprint 2
PA4343.222NLT	2.2	22	3.8	4.2	37	Footprint 2
PA4343.272NLT	2.7	20	4.3	5.5	32	Footprint 2
PA4343.332NLT	3.3	18	5.7	6.8	30	Footprint 2
PA4343.472NLT	4.7	13.5	7	8.4	28	Footprint 2
PA4343.562NLT	5.6	12.5	8.5	10	23	Footprint 2
PA4343.682NLT	6.8	11.5	9.5	11.5	18	Footprint 2
PA4343.822NLT	8.2	10.5	12	15.5	15.5	Footprint 2

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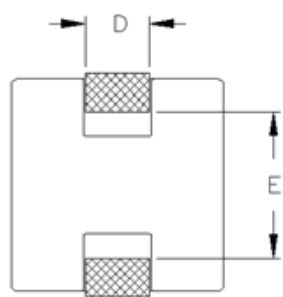
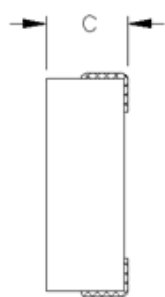
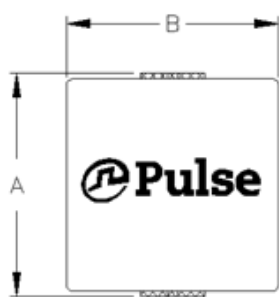
Part Number	Inductance 100KHz, 1V	Rated Current	DC Resistance		Saturation Current	Mechanical
			TYP.	MAX.		
	uH±20%	A	mΩ	mΩ	A	
PA4343.103NLT	10	10	13.2	16.5	15.5	Footprint 2
PA4343.133NLT	13	9	21	24	13	Footprint 2
PA4343.153NLT	15	9	23.2	28	12.5	Footprint 2
PA4343.223NLT	22	9	32.5	37	12	Footprint 2
PA4343.333NLT	33	8	48	58	11	Footprint 2
PA4343.473NLT	47	6.5	76	90	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.
- Please note that the inductance tolerance of all parts are ±20%, except .151NLT which is ±30%.
- Parts shown in bold are standard catalog parts and are available through sample stock and distribution. Parts in lighter font are available but are not necessarily held in sample stock or distribution **and lead times may be longer**. Please contact Pulse for availability.

Mechanical

PA4343.XXXNLT



Final Layout



SUGGESTED PAD LAYOUT

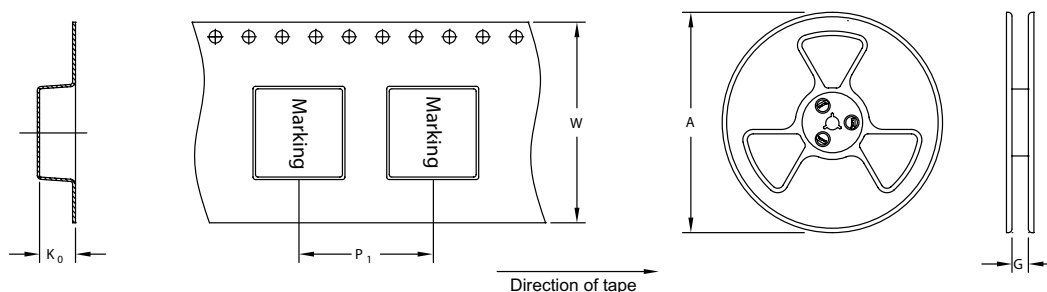
Series	Mechanical	A	B	C	D	E	F	G	H
PA4343.XXXNLT	Footprint 1	14.0 Max	12.8 Max	6.5 Max	(4.0)	(8.9)	(4.3)	(3.1)	(8.0)
PA4343.XXXNLT	Footprint 2	14.0 Max	12.8 Max	6.5 Max	(4.7)	(8.9)	(5.0)	(3.1)	(8.0)

All Dimensions in mm.

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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
PA4343.XXXNLT	Ø330	24	16	24	7.0	500

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