SMT Power Inductors

High Current Molded Power Inductor - PA4344.XXXNLT Series





- Թ Height: 7.0mm Max
- *•* **Footprint:** 17.7mm x 17.2mm Max
- *Current Rating:* up to 52.0A
- *P* Inductance Range: 1.0uH to 100uH
- *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 -55°C to +125°C									
Part	Inductance 100KHz, 1V	Rated Current	DC Resistance TYP. MAX.		- Saturation Current 1	Saturation Current 2			
Number	uH±20%	Α	mΩ	mΩ	Α	A			
PA4344.102NLT	1.0	52	1.6	2	60	70			
PA4344.132NLT	1.3	49	1.7	2.3	54	67			
PA4344.152NLT	1.5	47	2	2.5	52	65			
PA4344.222NLT	2.2	43.5	2.4	2.7	47	62			
PA4344.332NLT	3.3	28	3.5	3.9	45	54			
PA4344.472NLT	4.7	25	4.8	5.5	41	50			
PA4344.562NLT	5.6	21	5.8	7.05	40	45			
PA4344.682NLT	6.8	19	8.4	9.2	32	39			
PA4344.822NLT	8.2	18	9.6	10.8	25	31			
PA4344.103NLT	10	16.5	11.8	13	24	29			
PA4344.153NLT	15	12.5	17.8	20.5	23	27			
PA4344.223NLT	22	12	25.1	26.5	18	23			
PA4344.333NLT	33	10.7	38	44	15	20			
PA4344.393NLT	39	9.2	40	48	11	18			
PA4344.473NLT	47	8.7	48	55	9.5	16			
PA4344.563NLT	56	7.8	54	62	9	15			
PA4344.683NLT	68	7	68	80	8	13			
PA4344.104NLT	100	5.3	102	118	6.5	12			

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Notes:

- Actual temperature of the component during system operation (ambient plus 1. temperature rise) must be within the standard operating range.
- 2. The saturation current 1 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 saturation current 2 is the current at which the initial inductance drops approxi-3. mately 40% 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 4. 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.

- 5. 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.
- Parts shown in bold are standard catalog parts and are available through sample 6. 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 availablity.

Mechanical PA4344.XXXNLT Pulse G

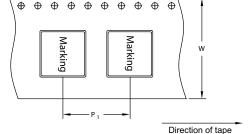
Final Layout

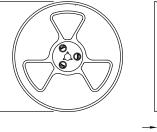
SUGGESTED PAD LAYOUT

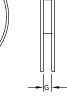
Series	A	В	C	D	E	F	G	H
PA4344.XXXNLT	17.7 Max	17.2 Max	7.0 Max	(11.9)	(13.1)	(12.5)	(3.15)	(12.2)
All Dimensions in mm								

TAPE & REEL INFO









SURFACE MOUNTING TYPE, REEL/TAPE LIST							
	REEL SIZ	'E (mm)	TAPE SIZE (mm)			QTY	
	A	G	P ₁	W	K ₀	PCS/REEL	
PA4344.XXXNLT	Ø330	32	24	32	7.5	200	

P771. J (07/18) power.pulseelectronics.com http://www.power.pulseelectronics.com/contact

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