High Current Molded Power Inductor - PA4343.XXXNLT & PM4343.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 designHigh 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								
Commercial ^{6,7}	Automotive ^{6,7}	Inductance ⁵ 100KHz, 1V uH±20%	Rated³ Current	DC Resistance		Saturation ²		
				TYP.	MAX.	Current	Mechanical	
				mΩ	mΩ	A		
PA4343.151NLT	PM4343.151NLT	0.15*	55	0.49	0.6	118	Footprint 1	
PA4343.221NLT	PM4343.221NLT	0.22	53	0.47	0.6	112	Footprint 1	
PA4343.301NLT	PM4343.301NLT	0.3	48	0.6	0.72	72	Footprint 1	
PA4343.331NLT	PM4343.331NLT	0.33	46	0.65	0.8	68	Footprint 1	
PA4343.361NLT	PM4343.361NLT	0.36	45	0.7	0.9	66	Footprint 1	
PA4343.401NLT	PM4343.401NLT	0.4	44	0.7	1	64	Footprint 1	
PA4343.451NLT	PM4343.451NLT	0.45	42	0.9	1.2	63	Footprint 1	
PA4343.471NLT	PM4343.471NLT	0.47	41	0.9	1.2	63	Footprint 1	
PA4343.501NLT	PM4343.501NLT	0.5	40	0.92	1.25	60	Footprint 1	
PA4343.561NLT	PM4343.561NLT	0.56	37	1.05	1.2	58	Footprint 1	
PA4343.681NLT	PM4343.681NLT	0.68	35	1.25	1.5	55	Footprint 1	
PA4343.821NLT	PM4343.821NLT	0.82	33	1.5	1.9	50	Footprint 1	
PA4343.102NLT	PM4343.102NLT	1	30	1.7	2.3	48	Footprint 1	
PA4343.142NLT	PM4343.142NLT	1.4	27	2.1	2.6	46	Footprint 1	
PA4343.152NLT	PM4343.152NLT	1.5	27	2.5	3	45	Footprint 1	
PA4343.182NLT	PM4343.182NLT	1.8	27	3.6	4	40	Footprint 2	
PA4343.222NLT	PM4343.222NLT	2.2	22	3.8	4.2	37	Footprint 2	
PA4343.272NLT	PM4343.272NLT	2.7	20	4.3	5.5	32	Footprint 2	
PA4343.332NLT	PM4343.332NLT	3.3	18	5.7	6.8	30	Footprint 2	
PA4343.472NLT	PM4343.472NLT	4.7	13.5	7	8.4	28	Footprint 2	
PA4343.562NLT	PM4343.562NLT	5.6	12.5	8.5	10	23	Footprint 2	
PA4343.682NLT	PM4343.682NLT	6.8	11.5	9.5	11.5	18	Footprint 2	
PA4343.822NLT	PM4343.822NLT	8.2	10.5	12	15.5	15.5	Footprint 2	

Power.PulseElectronics.com

High Current Molded Power Inductor - PA4343.XXXNLT & PM4343.XXXNLT Series



Electrical Specifications @ 25°C - Operating Temperature -55°C to +125°C								
	Automotive ^{6,7}	Inductance ⁵ 100KHz, 1V	Rated³ Current	DC Resistance		Saturation ²		
Commercial ^{6,7}				TYP.	MAX.	Current	Mechanical	
		uH±20%	A	mΩ	mΩ	A		
PA4343.103NLT	PM4343.103NLT	10	10	13.2	16.5	15.5	Footprint 2	
PA4343.133NLT	PM4343.133NLT	13	9	21	24	13	Footprint 2	
PA4343.153NLT	PM4343.153NLT	15	9	23.2	28	12.5	Footprint 2	
PA4343.223NLT	PM4343.223NLT	22	9	32.5	37	12	Footprint 2	
PA4343.333NLT	PM4343.333NLT	33	8	48	58	11	Footprint 2	
PA4343.473NLT	PM4343.473NLT	47	6.5	76	90	9.5	Footprint 2	

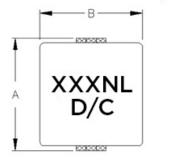
Notes:

- 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 compnent in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effect) to the component.
- 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 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.
- 4. 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

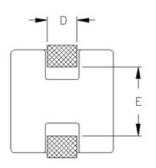
- verified in the end application.
- 5. Please note that the inductance tolerance of all parts are +/-20% except those indicated with a * which are +/-30%.
- Parts shown in bold are standard catalog parts and are available through sample stock and distribution. Parts in lighter font are available but are not necessarily held in sample stock or distribution and lead times may be longer. Please contact Pulse for availablity.
- Both the PA and PM part numbers are AEC-Q200 qualified parts. The PM part numbers
 have full automotive IATF16949 certification. The PM part number dimensions are
 100% tested in production but do not necessarily meet a product capability index
 (Cpk)> 1.33 and therefore may not strictly conform to PPAP.
- 8. Special Characteristics

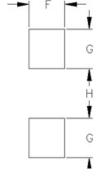
Mechanical

PA4343/PM4343









Final Layout

SUGGESTED PAD LAYOUT

Series	Mechanical	A	В	C	D	E	F	G	Н
PA4343/PM4343	Footprint 1	14.0 Max	12.8 Max	6.5 Max	(4.0)	(8.9)	(4.3)	(3.1)	(8.0)
PA4343/PM4343	Footprint 2	14.0 Max	12.8 Max	6.5 Max	(4.7)	(8.9)	(5.0)	(3.1)	(8.0)

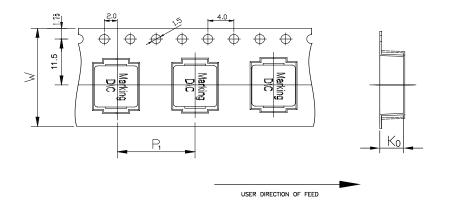
All Dimensions in mm.

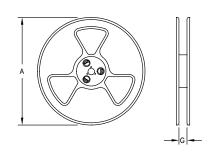
Power.PulseElectronics.com

High Current Molded Power Inductor - PA4343.XXXNLT & PM4343.XXXNLT Series



TAPE & REEL INFO

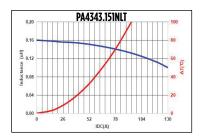




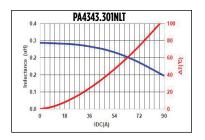
SURFACE MOUNTING TYPE, REEL/TAPE LIST								
	REEL SIZ	'E (mm)	T <i>A</i>	QTY				
	A	G	P ₁	W	K ₀	PCS/REEL		
PA4343/PM4343	Ø330	24	16	24	7.0	500		

Typical Performance Curves

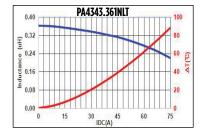
PA4343.XXXNLT and PM4343.XXXNLT

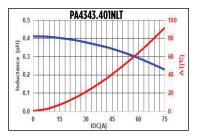












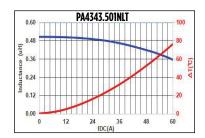
Power.PulseElectronics.com

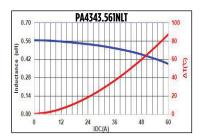
High Current Molded Power Inductor - PA4343.XXXNLT & PM4343.XXXNLT Series

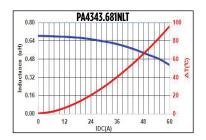


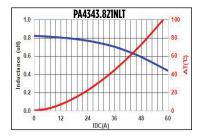


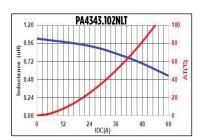


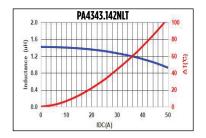




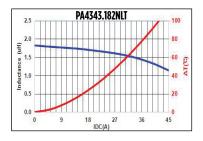


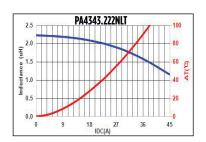




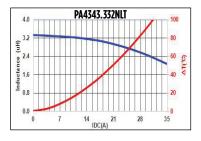


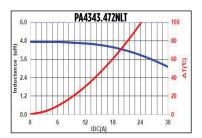


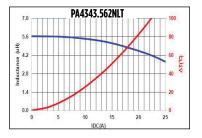






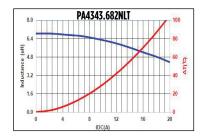


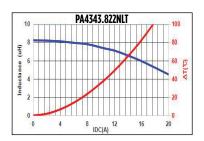


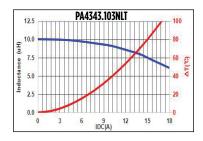


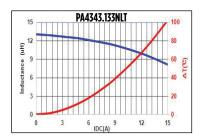
Power.PulseElectronics.com

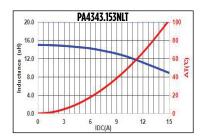
High Current Molded Power Inductor - PA4343.XXXNLT & PM4343.XXXNLT Series

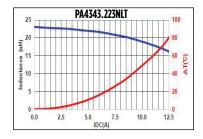


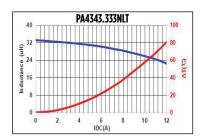


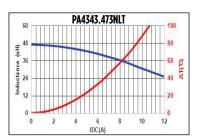












For More Information:

Americas - prodinfo_power@pulseelectronics.com | Europe - power-apps-europe@pulseelectronics.com | Asia - power-apps-asia@pulseelectronics.com

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, 2020. Pulse Electronics, Inc. All rights reserved.



Power.PulseElectronics.com



单击下面可查看定价,库存,交付和生命周期等信息

>>Pulse(普思)