










# SMT Power Inductors

High Current Molded Power Inductor - PA4344.XXXNLT & PM4344.XXXNLT Series



-  **Height:** 7.0mm Max
-  **Footprint:** 17.7mm x 17.2mm Max
-  **Current Rating:** up to 52.0A
-  **Inductance Range:** 1.0uH to 100uH
-  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
-  Available in Commercial (PA) and Automotive (PM) grades

Electrical Specifications @ 25°C - Operating Temperature -55°C to +125°C							
Commercial <sup>6,7</sup>	Automotive <sup>6,7</sup>	Inductance 100KHz, 1V  uH±20%	Rated Current  A	DC Resistance		Saturation Current 1  A	Saturation Current 2  A
				TYP.	MAX.		
				mΩ	mΩ		
PA4344.102NLT	PM4344.102NLT	1.0	52	1.6	2	60	70
PA4344.132NLT	PM4344.132NLT	1.3	49	1.7	2.3	54	67
PA4344.152NLT	PM4344.152NLT	1.5	47	2	2.5	52	65
PA4344.222NLT	PM4344.222NLT	2.2	43.5	2.4	2.7	47	62
PA4344.332NLT	PM4344.332NLT	3.3	28	3.5	3.9	45	54
PA4344.472NLT	PM4344.472NLT	4.7	25	4.8	5.5	41	50
PA4344.562NLT	PM4344.562NLT	5.6	21	5.8	7.05	40	45
PA4344.682NLT	PM4344.682NLT	6.8	19	8.4	9.2	32	39
PA4344.822NLT	PM4344.822NLT	8.2	18	9.6	10.8	25	31
PA4344.103NLT	PM4344.103NLT	10	16.5	11.8	13	24	29
PA4344.153NLT	PM4344.153NLT	15	12.5	17.8	20.5	23	27
PA4344.223NLT	PM4344.223NLT	22	12	25.1	26.5	18	23
PA4344.333NLT	PM4344.333NLT	33	10.7	38	44	15	20
PA4344.393NLT	PM4344.393NLT	39	9.2	40	48	11	18
PA4344.473NLT	PM4344.473NLT	47	8.7	48	55	9.5	16
PA4344.563NLT	PM4344.563NLT	56	7.8	54	62	9	15
PA4344.683NLT	PM4344.683NLT	68	7	68	80	8	13
PA4344.104NLT	PM4344.104NLT	100	5.3	102	118	6.5	12

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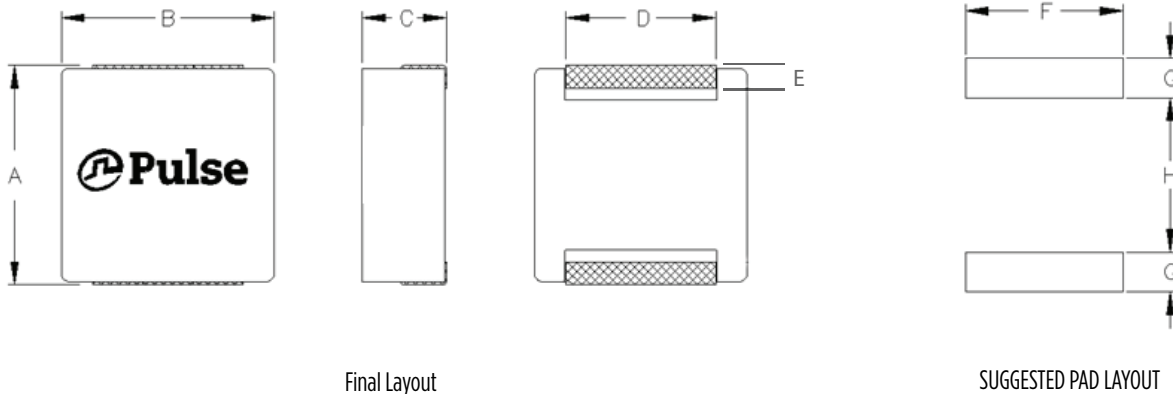


## Notes:

- Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
- 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 approximately 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 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.
- 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.
- The PM prefix parts are AEC-Q200 qualified and has full automotive IATF16949 certification. The mechanical 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.
- Special characteristics

## Mechanical

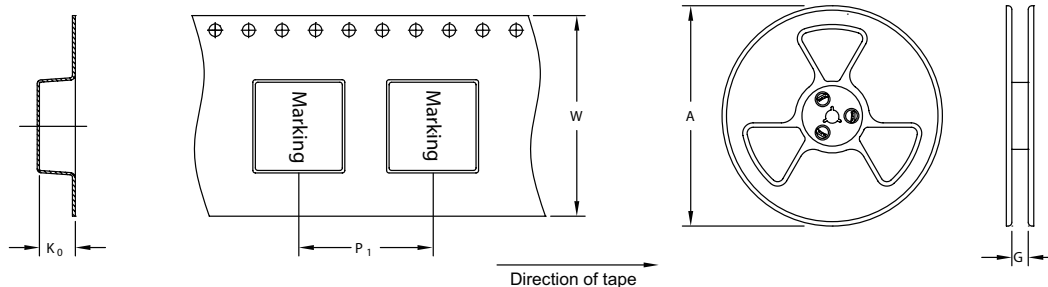
### PA4344/PM4344



Series	A	B	C	D	E	F	G	H
<b>PA4344/PM4344</b>	17.7 Max	17.2 Max	7.0 Max	11.9 +/- 0.3	2.1 +/- 0.3	(12.5)	(3.15)	(12.2)

All Dimensions in mm.

### TAPE & REEL INFO



SURFACE MOUNTING TYPE, REEL/TAPE LIST						
	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P <sub>1</sub>	W	K <sub>0</sub>	PCS/REEL
PA4344/PM4344	Ø330	32	24	32	7.5	200

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## 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 Rd  
Zhongli City  
Taoyuan City 32057  
Taiwan (R.O.C)

Tel: 886 3 4356768  
Fax: 886 3 4356820

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