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 ^{6,7}	Automotive ^{6,7}	◯ Inductance 100KHz, 1V	Rated Current	DC Resistance TYP. MAX.		Saturation Current 1	Saturation Current 2		
		uH±20%		mΩ	mΩ	A	A		
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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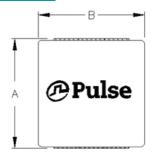


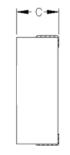
Notes:

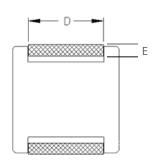
- 1. Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
- 2. The saturation current 1 is the current at which the initial inductance drops approximately 30% at the stated ambient temperature. This current is determined by placingthe component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effect) to the component.
- 3. 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.
- 4. 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.
- 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 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.
- 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.
- 8. Special characteristics 🔘

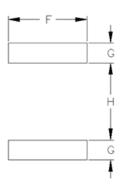
Mechanical

PA4344/PM4344









Final Layout

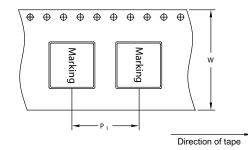
SUGGESTED PAD LAYOUT

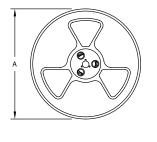
Series		A	В	С	D	E	F	G	Н
PA4344/PM	1344	17.7 Max	17.2 Max	7.0 Max	11.9 +/- 0.3	2.1 +/- 0.3	(12.5)	(3.15)	(12.2)

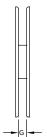
All Dimensions in mm.

TAPE & REEL INFO









SURFACE MOUNTING TYPE, REEL/TAPE LIST							
	REEL SIZ	'E (mm)	TAPE SIZE (mm)			QTY	
	Α	G	P ₁	W	K _o	PCS/REEL	
PA4344/PM4344	Ø330	32	24	32	7.5	200	

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