SMT Power Inductors

Molded Power Inductor - PA4340.XXXNLT AND PM4340.XXXNLT Series













Height: 3.0mm Max

Prootprint: 6.0mm x 5.4mm Max

Current Rating: up to 23A

Inductance Range: 0.10uH to 33uH

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	Rated	DC F	Saturation		
			Current	TYP.	MAX.	Current	
(-40°C to 125°C)	(-55°C to 155°C)	uH±20%	Α	mΩ	mΩ	A	
PA4340.101NLT	PM4340.101NLT	0.10*	23	2.5	3.0	27	
PA4340.151NLT	PM4340.151NLT	0.15*	18	2.3	2.7	30	
PA4340.201NLT	PM4340.201NLT	0.20*	16	2.6	3.2	25	
PA4340.221NLT	PM4340.221NLT	0.22*	15.5	3.7	4.4	21	
PA4340.331NLT	PM4340.331NLT	0.33	14	4.3	5.0	18	
PA4340.471NLT	PM4340.471NLT	0.47	12	6.4	7.4	16	
PA4340.561NLT	PM4340.561NLT	0.56	10	8.0	10	15	
PA4340.681NLT	PM4340.681NLT	0.68	8.5	10	12	14	
PA4340.821NLT	PM4340.821NLT	0.82	8.0	11.5	13	12.5	
PA4340.102NLT	PM4340.102NLT	1.0	7.0	13	14	11	
PA4340.122NLT	PM4340.122NLT	1.2	6.5	14	16	11	
PA4340.152NLT	PM4340.152NLT	1.5	6.0	16	25	10	
PA4340.222NLT	PM4340.222NLT	2.2	5.5	25	35	9.0	
PA4340.332NLT	PM4340.332NLT	3.3	5.0	32	38	8.0	
PA4340.472NLT	PM4340.472NLT	4.7	4.6	50	53	6.0	
PA4340.562NLT	PM4340.562NLT	5.6	4.25	55	63	4.5	
PA4340.682NLT	PM4340.682NLT	6.8	4.0	68	76.2	4.3	
PA4340.103NLT	PM4340.103NLT	10	2.75	110	128	3.5	
PA4340.153NLT	PM4340.153NLT	15	2.1	165	190	2.6	
PA4340.183NLT	PM4340.183NLT	18	2.0	195	230	2.3	
PA4340.223NLT	PM4340.223NLT	22	1.9	220	250	1.7	
PA4340.333NLT	PM4340.333NLT	33	1.6	380	440	1.6	

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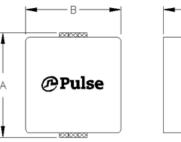
Notes:

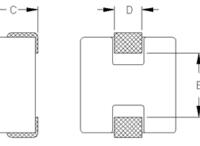
- 1. Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
- The saturation current is the current at which the initial inductance drops approximately 30% at the stated ambient temperature. This current is determined by 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.
- 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

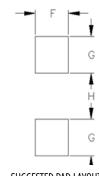
- other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Please note that the inductance tolerance of all parts are ±20% except .101NLT, .151NLT, .201NLT and .221NLT which are ±30%.
- Parts shown in bold are standard catalog parts and are 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 PA4340.XXXNLT and PM4340.XXXNLT are AEC-Q200 qualified parts. The PM4340.XXXNLT have full automotive IATF16949 certification. The PM4340.XXXNLT 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.

Mechanical

PA4340/ PM4340







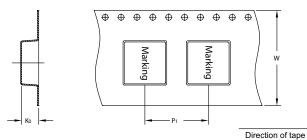
Final Layout

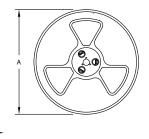
SUGGESTED PAD LAYOUT

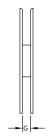
Series	A	В	C	D	E	F	G	H
PA4340/PM4340	6.0 MAX	5.4 MAX	3.0 MAX	(1.5)	3.5 MAX	(1.8)	(2.0)	(2.5)

All Dimensions in mm.

TAPE & REEL INFO







SURFACE MOUNTING TYPE, REEL/TAPE LIST							
	REEL SIZ	'E (mm)	T <i>A</i>	QTY			
	А	G	P ₁	W	K_{0}	PCS/REEL	
PA4340/PM4340	Ø330	12	8	12	3.3	2000	

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For More Information Pulse Worldwide Headquarters 15255 Innovation Drive Ste 100 San Diego, CA 92128 U.S.A.	Pulse Europe Pulse Electronics GmbH Am Rottland 12 58540 Meinerzhagen Germany	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	Pulse North China Room 2704/2705 Super Ocean Finance Ctr. 2067 Yan An Road West Shanghai 200336 China	Pulse South Asia 3 Fraser Street 0428 DUO Tower Singapore 189352	Pulse North Asia 1F., No.111 Xiyuan Rd Zhongli City Taoyuan City 32057 Taiwan (R.O.C)
Tel: 858 674 8100	Tel: 49 2354 777 100	Tel: 86 755 33966678	Tel: 86 21 62787060	Tel: 65 6287 8998	Tel: 886 3 4356768
Fax: 858 674 8262	Fax: 49 2354 777 168	Fax: 86 755 33966700	Fax: 86 2162786973	Fax: 65 6280 0080	Fax: 886 3 4356820

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