SMT Power Inductors

High Current Molded Power Inductor - PA4345.XXXNLT & PM4345.XXXNLT Series





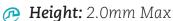












Footprint: 6.0mm x 5.4mm Max Current Rating: up to 18.0A

Inductance Range: 0.1uH to 22uH

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 Sp	pecifications @ 25°C – Op	erating Temperature -55°	C to +125°C	
Commercial ^{6,7}	Automotive ^{6,7}	◯ Inductance⁵ 100KHz, 1V			sistance MAX.	Saturation Current
Commercial		uH±20%	A	mΩ	mΩ	A
PA4345.101NLT	PM4345.101NLT	0.10*	18.0	3.6	4.0	45.0
PA4345.151NLT	PM4345.151NLT	0.15*	16.0	3.8	4.6	27.0
PA4345.221NLT	PM4345.221NLT	0.22	15.0	4.0	5.5	25.0
PA4345.241NLT	PM4345.241NLT	0.24	13.0	6.0	7.0	23.0
PA4345.331NLT	PM4345.331NLT	0.33	12.0	6.3	7.3	21.3
PA4345.471NLT	PM4345.471NLT	0.47	11.5	7.3	8.6	18.0
PA4345.561NLT	PM4345.561NLT	0.56	10.7	9.3	11.2	15.0
PA4345.681NLT	PM4345.681NLT	0.68	10.0	11.0	12.4	12.8
PA4345.102NLT	PM4345.102NLT	1.0	7.0	17.5	20.0	13.7
PA4345.122NLT	PM4345.122NLT	1.2	6.2	23.0	28.0	11.0
PA4345.152NLT	PM4345.152NLT	1.5	5.5	26.5	30.5	9.8
PA4345.222NLT	PM4345.222NLT	2.2	4.2	42.0	50.0	9.0
PA4345.332NLT	PM4345.332NLT	3.3	3.3	66.0	76.0	7.3
PA4345.472NLT	PM4345.472NLT	4.7	2.8	103	116	5.0
PA4345.562NLT	PM4345.562NLT	5.6	2.5	112	122	4
PA4345.682NLT	PM4345.682NLT	6.8	2.4	130	150	3.8
PA4345.822NLT	PM4345.822NLT	8.2	2.3	148	171	3.5
PA4345.103NLT	PM4345.103NLT	10	2.3	180	199	3.4
PA4345.153NLT	PM4345.153NLT	15	1.9	240	270	2.8
PA4345.223NLT	PM4345.223NLT	22	1.5	350	390	1.8

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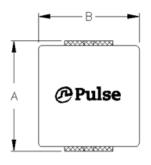
Notes:

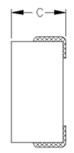
- Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
- 2. The saturation current is the current at which the initial inductance drops approximately 30% at the stated ambient temperature. This current is determined by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

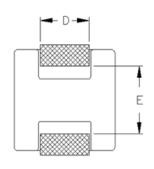
- verified in the end application.
- Please note that the inductance tolerance of all parts are ±20%, except .101NLT and .151NLT which are ±30%.
- Parts shown in bold are standard catalog parts and are available through sample stock and distribution. Parts in lighter font are available but are not necessarily held in sample stock or distribution and lead times may be longer. Please contact Pulse for availablity.
- 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

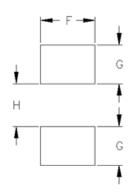
Mechanical

PA4345/PM4345









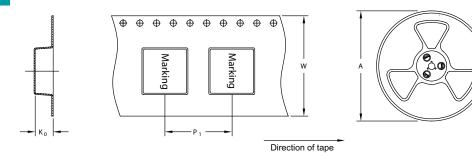
Final Layout

SUGGESTED PAD LAYOUT

	Series	A	В	C	D	E	F	G	н
F	PA4345/PM4345	6.0 Max	5.4 Max	2.0 Max	(2.5)	(3.5)	(2.8)	(2.0)	(2.2)

All Dimensions in mm.

TAPE & REEL INFO



SURFACE MOUNTING TYPE, REEL/TAPE LIST							
	REEL SIZ	ZE (mm)	T.A	QTY			
	Α	G	P ₁	W	K _o	PCS/REEL	
PA4545/PM4345	Ø330	12	8	12	2.3	3000	

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