SMT Power Inductors

High Current Molded Power Inductor - PA4341.XXXNLT & PM4341.XXXNLT

- ***Height:*** *3.0mm Max*
- ***Footprint:*** *7.6mm x 6.9mm Max*
- ***Current Rating:*** *up to 32.5A*
- ***Inductance Range:*** *0.1uH to 47.0uH*
- *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*

Electrical Specifications @ 25°C – Operating Temperature -55°C to +125°C						
Commercial[6,7]	Automotive[6,7]	Inductance[5] 100KHz, 1V	Rated Current	DC Resistance		Saturation Current
				TYP.	MAX.	
		(uH ±20%)	A	mΩ	mΩ	A
PA4341.101NLT	PM4341.101NLT	0.10*	32.5	1.2	1.7	60
PA4341.151NLT	PM4341.151NLT	0.15*	27	1.5	1.9	45
PA4341.161NLT	PM4341.161NLT	0.16*	27	1.5	1.9	45
PA4341.201NLT	PM4341.201NLT	0.20*	24	1.8	2.5	41
PA4341.221NLT	PM4341.221NLT	0.22*	23	2.1	2.8	40
PA4341.301NLT	PM4341.301NLT	0.30	21	3.2	3.8	35
PA4341.331NLT	PM4341.331NLT	0.33	20	3.5	3.9	32
PA4341.361NLT	PM4341.361NLT	0.36	19	3.6	4.2	32
PA4341.471NLT	PM4341.471NLT	0.47	17.5	4.0	4.2	26
PA4341.561NLT	PM4341.561NLT	0.56	16.5	4.7	5.0	25.5
PA4341.601NLT	PM4341.601NLT	0.60	16	4.7	5.2	25.5
PA4341.681NLT	PM4341.681NLT	0.68	15.5	4.8	5.5	25
PA4341.751NLT	PM4341.751NLT	0.75	14.5	5.5	6.6	24.5
PA4341.821NLT	PM4341.821NLT	0.82	13	6.7	8.0	24
PA4341.102NLT	PM4341.102NLT	1.0	11	8.3	10	22
PA4341.122NLT	PM4341.122NLT	1.2	10	10	12	20
PA4341.152NLT	PM4341.152NLT	1.5	9.0	13	15	18
PA4341.182NLT	PM4341.182NLT	1.8	8.5	14	17	16
PA4341.202NLT	PM4341.202NLT	2.0	8.2	16	19	15
PA4341.222NLT	PM4341.222NLT	2.2	8.0	18	20	14
PA4341.252NLT	PM4341.252NLT	2.5	7.0	20	22	13
PA4341.332NLT	PM4341.332NLT	3.3	6.0	28	30	13.5
PA4341.472NLT	PM4341.472NLT	4.7	5.5	37	40	10

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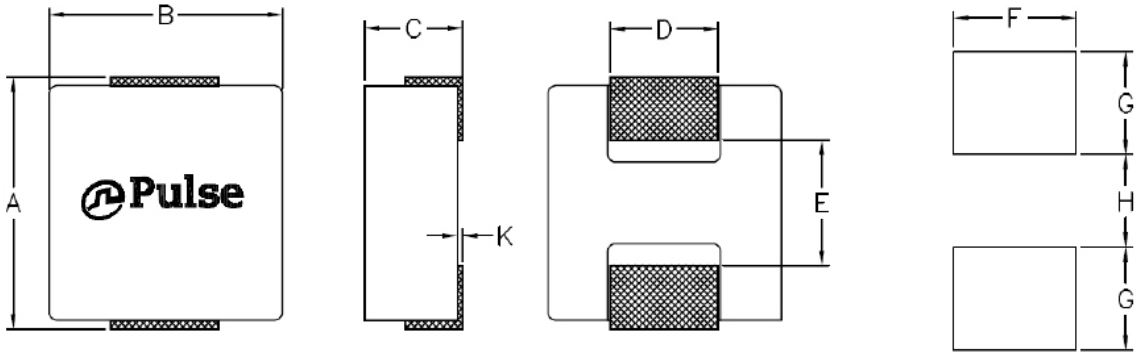
Commercial[6,7]	Automotive[6,7]	Inductance[5] 100KHz, 1V	Rated Current	DC Resistance		Saturation Current
				TYP.	MAX.	
		(uH ±20%)	A	mΩ	mΩ	A
PA4341.562NLT	PM4341.562NLT	**5.6**	**5.0**	**43**	**48**	**9.0**
PA4341.682NLT	PM4341.682NLT	**6.8**	**4.5**	**54**	**60**	**8.0**
PA4341.822NLT	PM4341.822NLT	**8.2**	**4.0**	**64**	**68**	**7.5**
PA4341.103NLT	PM4341.103NLT	**10**	**3.5**	**75**	**85**	**6.0**
PA4341.123NLT	PM4341.123NLT	**12**	**3.3**	**81**	**93**	**5.5**
PA4341.153NLT	PM4341.153NLT	15	3.0	107	123	4.0
PA4341.223NLT	PM4341.223NLT	**22**	**2.0**	**165**	**190**	**3.5**
PA4341.333NLT	PM4341.333NLT	33	2.0	200	240	2.5
PA4341.473NLT	PM4341.473NLT	**47**	**1.75**	**302**	**363**	**2.0**

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 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 .101NLT, .151NLT , .161NLT, .201NLT, and .221NLT which are ±30%.
6. 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.
7. The PA4341.XXXNLT and PM4341.XXXNLT are both AEC-Q200 qualified. The PM4341. XXXNLT part numbers are also IATF16949 certified. The mechanical dimensions are 100% tested in production but do not necessarily meet a product capability index (Cpk) 1.33 and therefore the PM4341.XXXNLT may not strictly conform to PPAP.

Mechanical

PA4341.XXXNLT and PM4341.XXXNLT



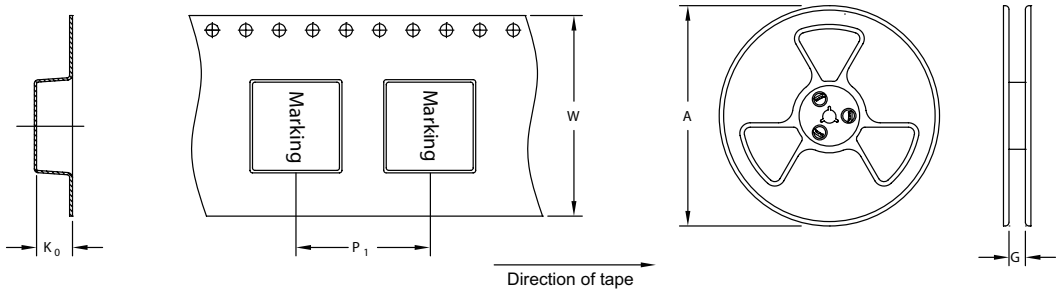
FINAL LAYOUT

SUGGESTED PAD LAYOUT

Series	A	B	C	D	E	F	G	H	K
PA4341/PM4341	7.6 MAX	6.9 MAX	3.0 MAX	(3.0)	(3.7)	(3.5)	(2.95)	(2.5)	(0-0.22)

All Dimensions in mm.

TAPE & REEL INFO



SURFACE MOUNTING TYPE, REEL/TAPE LIST						
	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P_1	W	K_0	PCS/REEL
PA4341/PM4341	Ø330	16	12	16	3.3	1000

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