High Current Molded Power Inductor - PA4341.XXXANLT Series













Meight: 3.0mm Max

Footprint: 7.4mm x 6.8mm Max

© Current Rating: up to 25.0A

Inductance Range: 0.15uH to 22.0uH

Shielded construction and compact design

Migh current, low DCR, and high efficiency

Minimized acoustic noise and minimized leakage flux

Electrical Specifications @ 25°C – Operating Temperature –55°C to +155°C									
Part Number <sup>6,7</sup>	Inductance <sup>5,8</sup> 100KHz, 1V	Rated³ Current	DC Resistance		Saturation² Current	SRF			
		TYP.	TYP.	MAX.	TYP.	TYP.	K factor		
		A	mΩ	mΩ	A	MHz			
PA4341.151ANLT	0.15*	25	1.7	2.1	36	160	336.4		
PA4341.221ANLT	0.22	21	2.0	2.5	32	130	524.0		
PA4341.331ANLT	0.33	20	2.8	3.4	22	95	271.6		
PA4341.361ANLT	0.36	18	3.3	3.9	21	90	216.5		
PA4341.471ANLT	0.47	16	3.4	4	18	62	250.5		
PA4341.561ANLT	0.56	15	3.9	4.5	16	57	210.5		
PA4341.681ANLT	0.68	14.5	4.7	5.3	15	52	178.3		
PA4341.821ANLT	0.82	13	5.4	6	14	50	150.9		
PA4341.102ANLT	1.0	11	6.7	7.4	13.5	42	134.0		
PA4341.122ANLT	1.2	9.5	7.7	9.5	12.5	40	113.4		
PA4341.152ANLT	1.5	9	10.2	12.1	12	38	83.3		
PA4341.222ANLT	2.2	7.5	13.5	15	9	26	68.5		
PA4341.272ANLT	2.7	7.0	17.3	20	8.8	25	61.3		
PA4341.332ANLT	3.3	6.0	19	22	8.5	22	55.4		
PA4341.472ANLT	4.7	5.0	28	33	5.5	20	43.3		
PA4341.562ANLT	5.6	5.0	39	42	5.2	17	34.9		
PA4341.682ANLT	6.8	4.2	43	50	5.0	16	48.6		
PA4341.822ANLT	8.2	4.0	54	60	4.7	15	40.5		
PA4341.103ANLT	10	3.5	62	68	4.5	14	35.9		
PA4341.153ANLT	15	2.5	110	140	4.0	10	31.5		
PA4341.223ANLT	22	2.0	150	190	2.5	8	22.9		

PulseElectronics.com P820.E (04/21)

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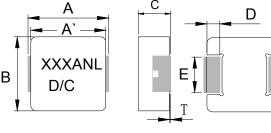
#### Notes:

- 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 by approximately 30% at the stated ambient temperature. The maximum allowable drop at this stated current is 40% of the initial inductance. 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.
- 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 maximum operating temperature under worst case operating conditions. Circuit design, PCB trace size and 8.

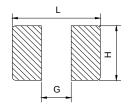
- thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Please note that the inductance tolerance of all parts are ±20%, except those indicated by an \* which are +/- 30%.
- Parts shown in bold are standard catalog 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.
  - Special Characteristics

### Mechanical

### PA4340.XXXANLT







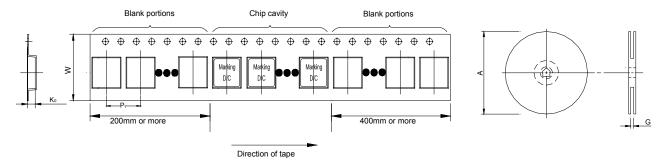
Final Layout

SUGGESTED PAD LAYOUT

Series	A	A`	В	С	D	E	T	L	G	Н
PA4341.XXXANLT	7.1±0.3	6.4±0.3	6.6±0.2	2.8±0.2	1.6±0.3	3.0±0.2	0~0.15	8.0	3.7	3.4

All Dimensions in mm.

### **TAPE & REEL INFO**



SURFACE MOUNTING TYPE, REEL/TAPE LIST									
	REEL SIZ	ZE (mm)	TA	QTY					
	A	G	P <sub>1</sub>	W	K <sub>0</sub>	PCS/REEL			
PA4341.XXXANLT	Ø330	16.4+2/-0	12.0±0.1	16±0.3	3.3±0.1	1000			

2 PulseElectronics.com P820.E (04/21)

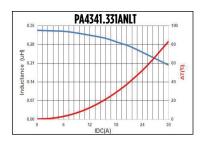
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### **Typical Performance Curves**

























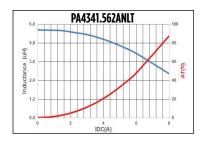






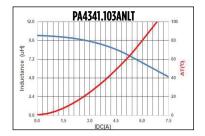
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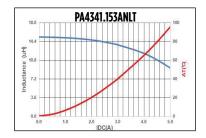
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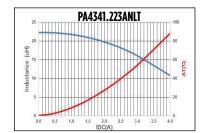




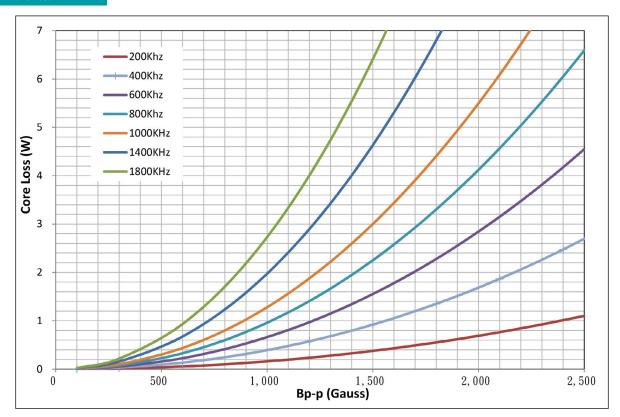








### **Core Loss**



Bp-p = K \*L(uH) \*delta I(A)

### **For More Information:**

Americas - prodinfo\_power@pulseelectronics.com | Europe - power-apps-europe@pulseelectronics.com | Asia - power-apps-asia@pulseelectronics.com

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