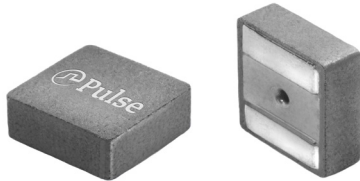


# SMT Power Inductors

High Current Composite Inductor - PA5006.XXXNLT and PM2206.XXXNLT



- Ⓟ **Height:** 2.05mm Max
- Ⓟ **Footprint:** 8.05mm x 7.8mm Max
- Ⓟ **Current Rating:** up to 35Apk
- Ⓟ **Inductance Range:** 0.27uH to 1.0uH
- Ⓟ High current, low DCR, and high efficiency
- Ⓟ Rated Voltage between Terminals: 60V
- Ⓟ Minimized acoustic noise and minimized leakage flux noise
- Ⓟ Available in Commercial (PA5006) and Automotive (PM2206) grades

## Electrical Specifications @ 25°C, Operating Temperature Range -55°C to +155°C

Part Number		Inductance 100KHz, 0.1V uH±20%	Rated <sup>5</sup> Current A	DC Resistance		Saturation <sup>2</sup> Current (25°C) A	Mechanical D mm±0.3	K Factor for Core Loss
Commerical	Automotive <sup>6</sup>			TYP. mΩ	MAX. mΩ			
PA5006.271NLT	PM2206.271NLT	0.27	21	2.9	3.5	32	6.6	141.7
PA5006.311NLT	PM2206.311NLT	0.31	20	4.0	4.8	31	6.2	141.7
PA5006.331NLT	PM2206.331NLT	0.33	19	4.0	4.8	31	6.2	141.7
PA5006.471NLT	PM2206.471NLT	0.47	17	5.1	6.2	25	6.2	103.9
PA5006.681NLT	PM2206.681NLT	0.68	13	7.9	9.2	23	6.2	82.1
PA5006.102NLT	PM2206.102NLT	1.00	11	9.8	10.8	20	6.2	67.8

### Notes:

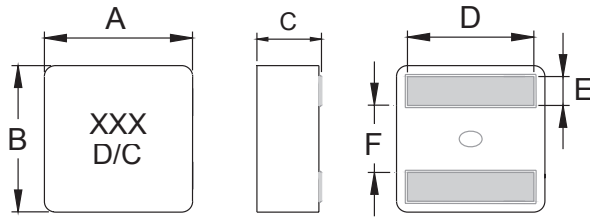
1. Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
2. The saturation current is the current at which the initial inductance is guaranteed to drop by no more than 40%. The typical inductance at a specified current can be found on the typical performance curves.
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 155 °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. The PM2206.XXXNLT part numbers are AEC-Q200 and IATF16949 certified. 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.
6. Special Characteristics Ⓟ

# SMT Power Inductors

High Current Composite Inductor - PA5006.XXXNLT and PM2206.XXXNLT

## Mechanical

### PA5006.XXXNLT and PM2206.XXXNLT



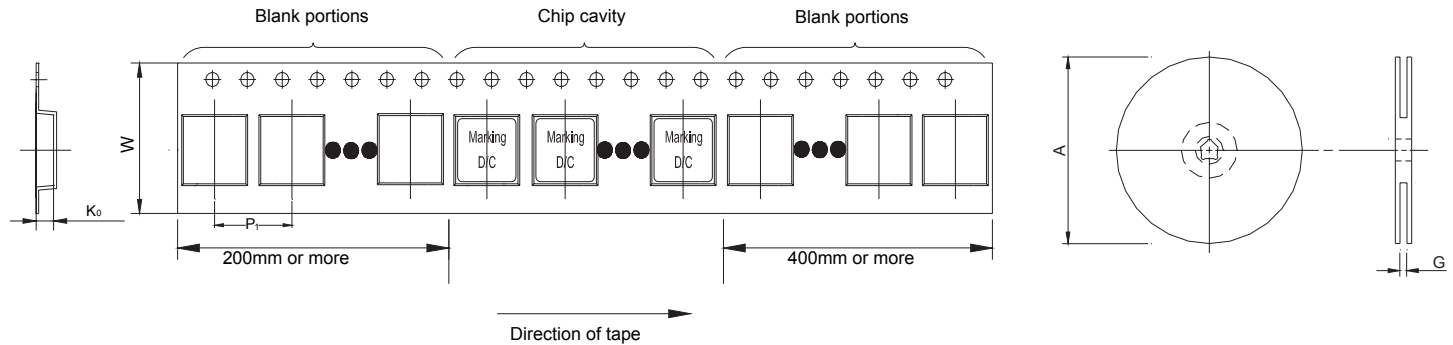
FINAL LAYOUT

SUGGESTED PAD LAYOUT

Series	A	B	C	D	E	F	L	G	H
PA5006/PM2206	7.8±0.25	7.6±0.2	1.85±0.2	See Spec Table	1.75±0.2	3.15±0.25	7.4 (REF)	2.8(REF)	7.2 (REF)

All Dimensions in mm.

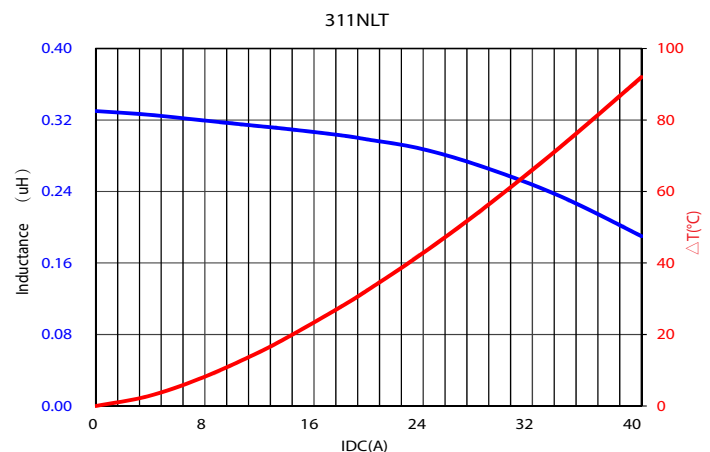
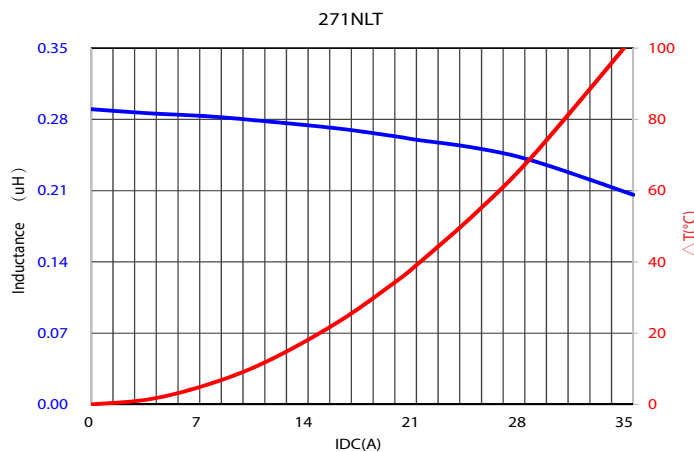
### TAPE & REEL INFO



### SURFACE MOUNTING TYPE, REEL/TAPE LIST

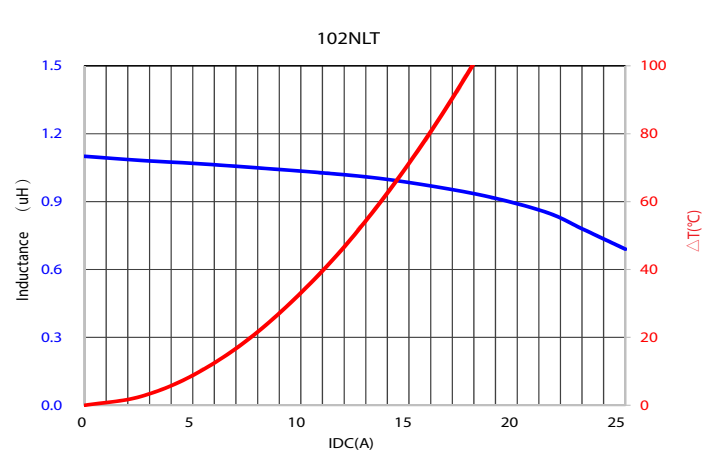
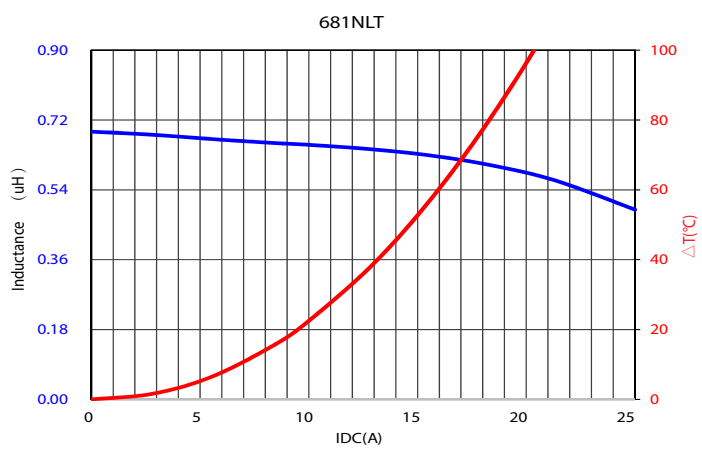
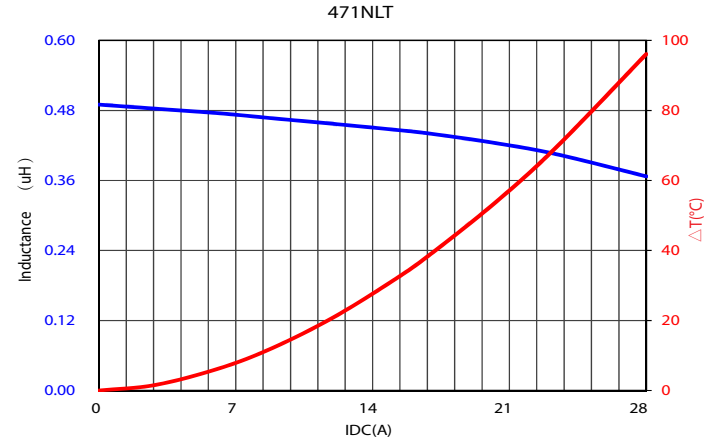
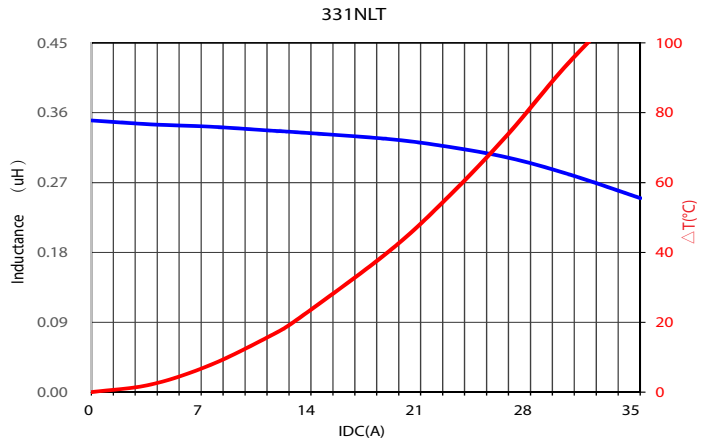
	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P <sub>1</sub>	W	K <sub>0</sub>	PCS/REEL
PA5006/PM2206	Ø330	16.4	12	16	2.3	2000

### Typical Performance Curves



# SMT Power Inductors

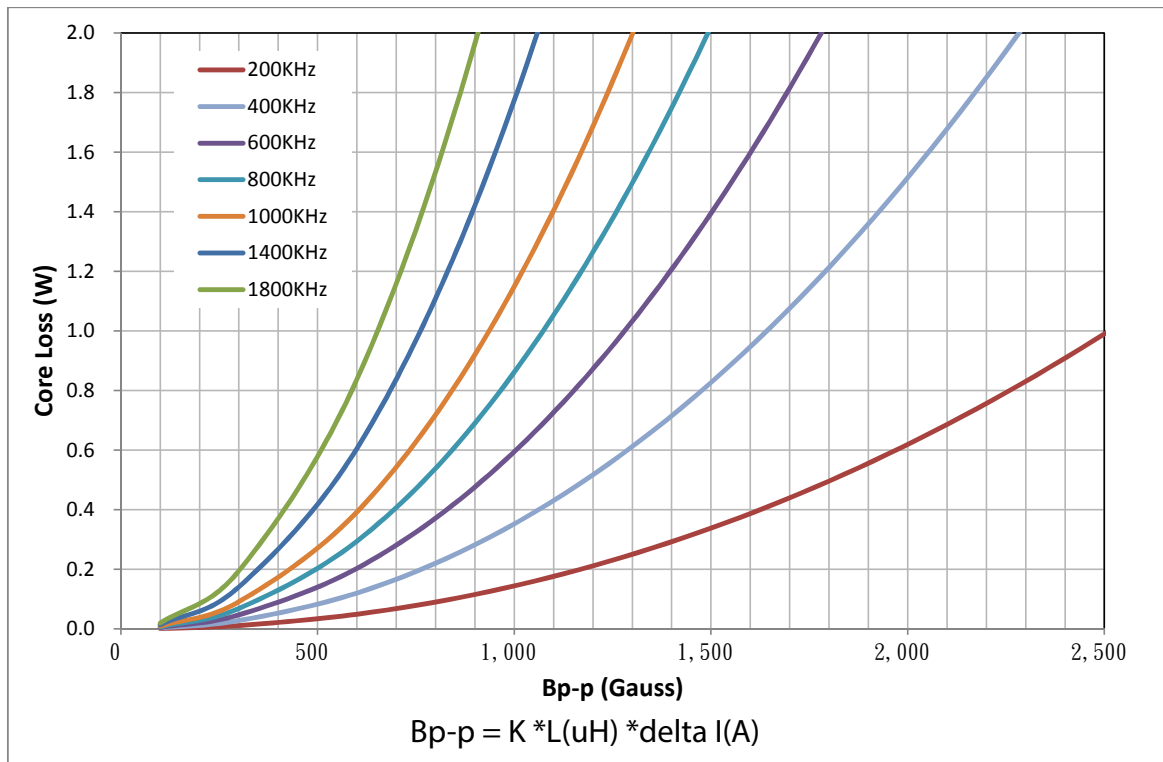
High Current Composite Inductor - PA5006.XXXNLT and PM2206.XXXNLT



# SMT Power Inductors

High Current Composite Inductor - PA5006.XXXNLT and PM2206.XXXNLT

## CORE LOSS vs FLUX DENSITY



### For More Information:

Americas - [prodinfo\\_power@pulseelectronics.com](mailto:prodinfo_power@pulseelectronics.com) | Europe - [power-apps-europe@pulseelectronics.com](mailto:power-apps-europe@pulseelectronics.com) | Asia - [power-apps-asia@pulseelectronics.com](mailto:power-apps-asia@pulseelectronics.com)

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