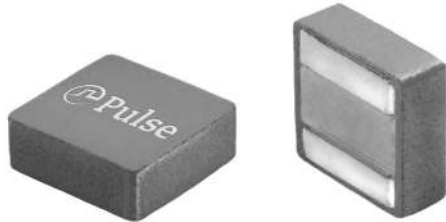


# SMT Power Inductors

High Current Composite Inductor - PA5005.XXXNLT and PM2205.XXXNLT



- Ⓟ **Height:** 5.0mm Max
- Ⓟ **Footprint:** 6.8mm x 6.6mm Max
- Ⓟ **Current Rating:** up to 24Apk
- Ⓟ **Inductance Range:** 0.82uH to 8.2uH
- Ⓟ High current, low DCR, and high efficiency
- Ⓟ High reliability
- Ⓟ Minimized acoustic noise and minimized leakage flux noise
- Ⓟ Available in Commercial (PA5005) and Automotive (PM2205) grades

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

Part Number		Inductance 100KHz, 0.1V uH±20%	Rated <sup>3</sup> Current A	DC Resistance		Saturation <sup>2</sup> Current (25°C) A	K Factor for Core Loss	Mechanical D ±0.3
Commerical	Automotive <sup>6</sup>			TYP.	MAX.			
				mΩ	mΩ			
PA5005.821NLT	PM2205.821NLT	0.82	21	3.8	4.18	20	132.2	5.3
PA5005.102NLT	PM2205.102NLT	1.0	20	4.1	4.52	18	132.2	5.3
PA5005.122NLT	PM2205.122NLT	1.2	18	5.3	5.83	16	109.2	5.3
PA5005.152NLT	PM2205.152NLT	1.5	17	5.7	6.3	14.5	93	5.3
PA5005.182NLT	PM2205.182NLT	1.8	16	6.4	7.1	13.5	93	5.3
PA5005.222NLT	PM2205.222NLT	2.2	13	7.7	8.5	12	81	5.2
PA5005.332NLT	PM2205.332NLT	3.3	11	11.2	12.5	10	64.4	5.2
PA5005.432NLT	PM2205.432NLT	4.3	9	15.1	16.2	8.5	53.4	5.2
PA5005.472NLT	PM2205.472NLT	4.7	8.5	16.7	18.4	8	49.2	5.2
PA5005.562NLT	PM2205.562NLT	5.6	7.0	20.0	22.0	8.3		5.2
PA5005.682NLT	PM2205.682NLT	6.8	6.6	23.1	25.4	7		5.2
PA5005.822NLT	PM2205.822NLT	8.2	6.2	28.6	31.5	6.8		5.2

### Notes:

- 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 is guaranteed to drop by no more than 40%. The typical inductance at a specified current can be found on the typical performance curves.
- 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 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.
- The PM2205.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.
- 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 availability.
- Special Characteristics

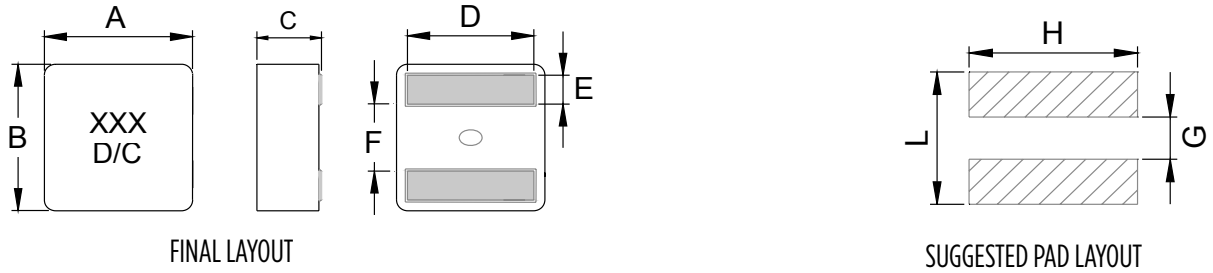
# SMT Power Inductors

High Current Composite Inductor - PA5005.XXXNLT and PM2205.XXXNLT



## Mechanical

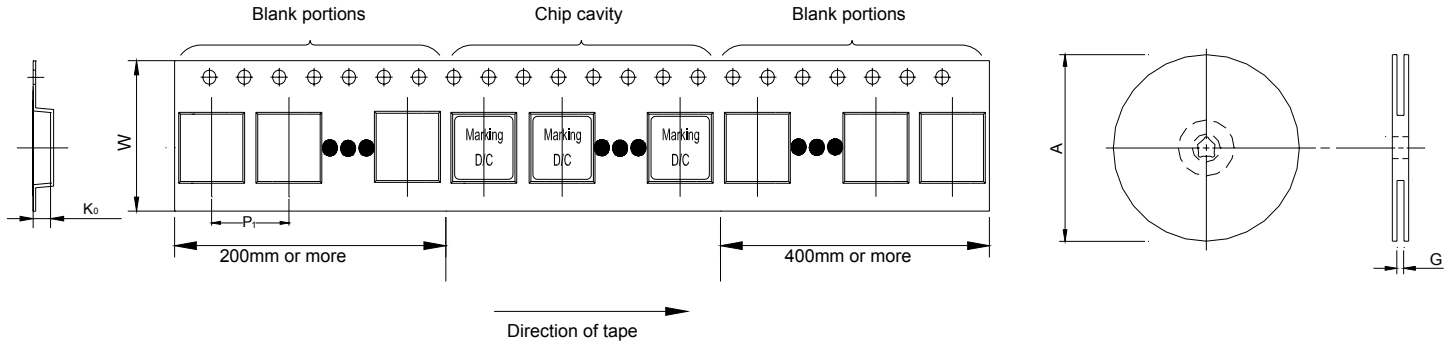
### PA5005.XXXNLT and PM2205.XXXNLT



Series	A	B	C	D	E	F	L	G	H
PA5005/PM2205	6.6±0.2	6.4±0.2	4.8±0.2	SEE SPEC TABLE	1.4±0.2	2.6±0.25	5.6 (REF)	2.5 (REF)	5.6 (REF)

All Dimensions in mm.

### TAPE & REEL INFO



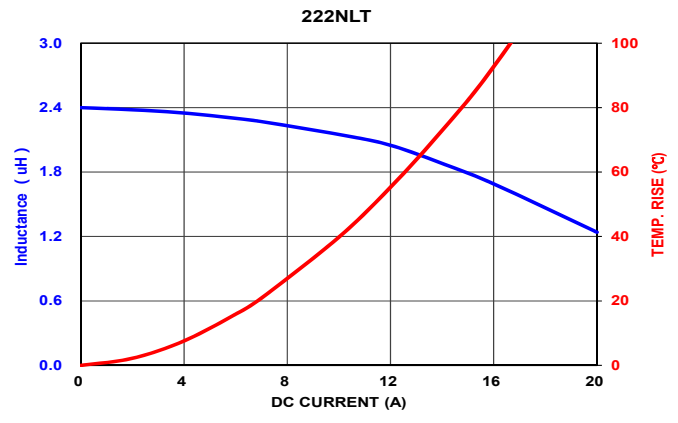
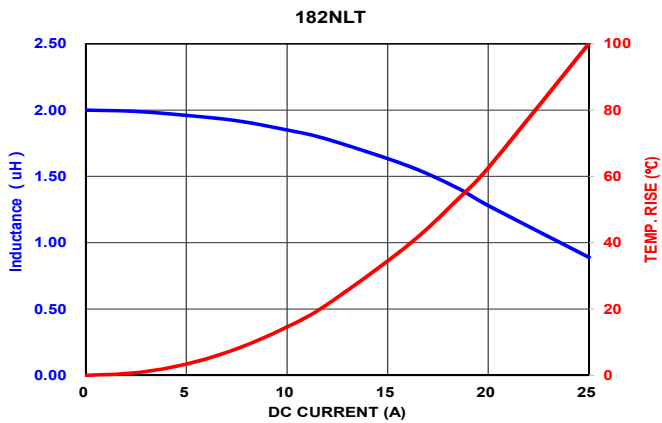
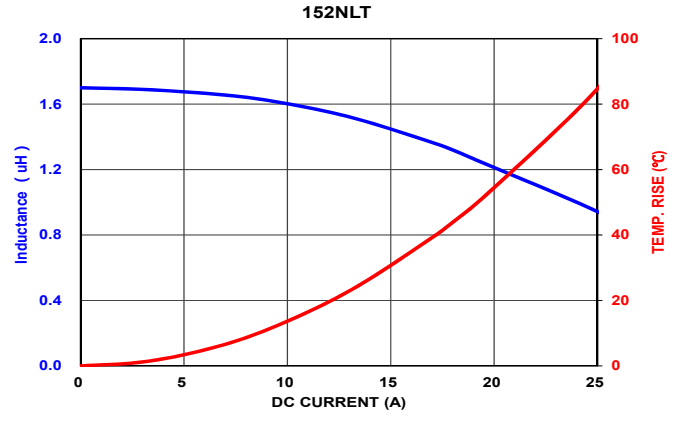
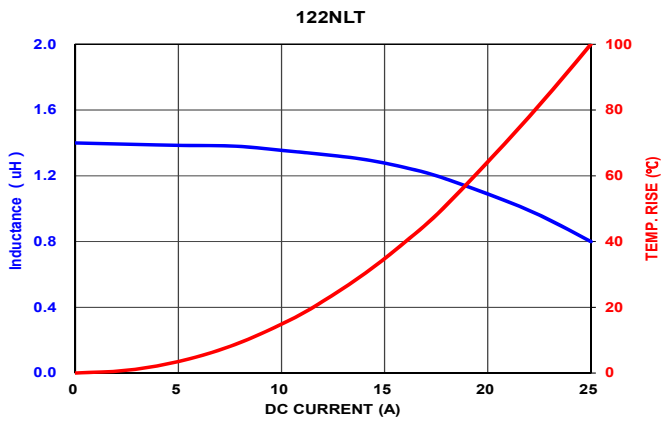
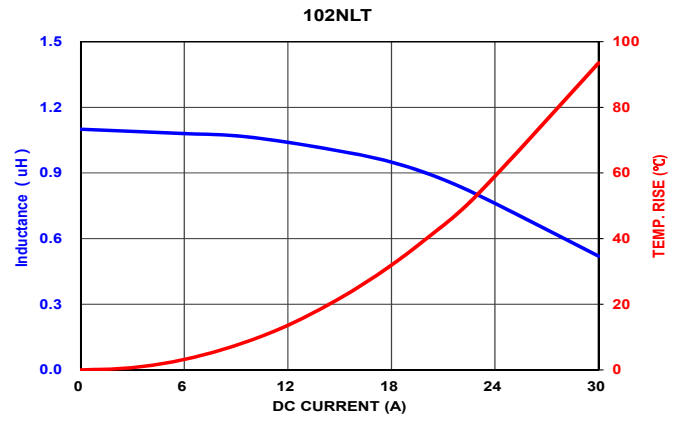
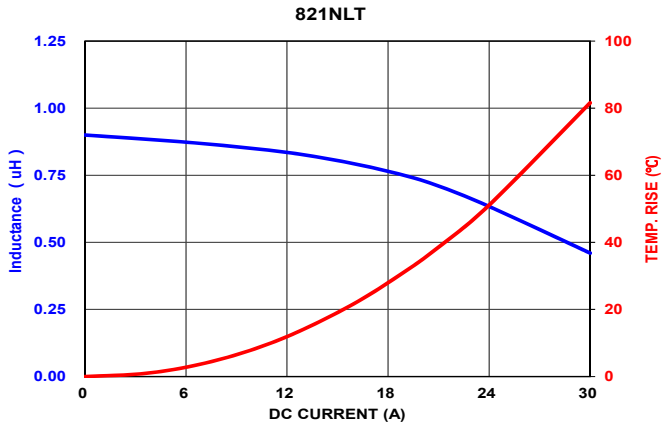
	SURFACE MOUNTING TYPE, REEL/TAPE LIST					
	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P <sub>1</sub>	W	K <sub>0</sub>	PCS/REEL
PA5005/PM2205	Ø330	16.4	12	16	5.3	800

# SMT Power Inductors

High Current Composite Inductor - PA5005.XXXNLT and PM2205.XXXNLT

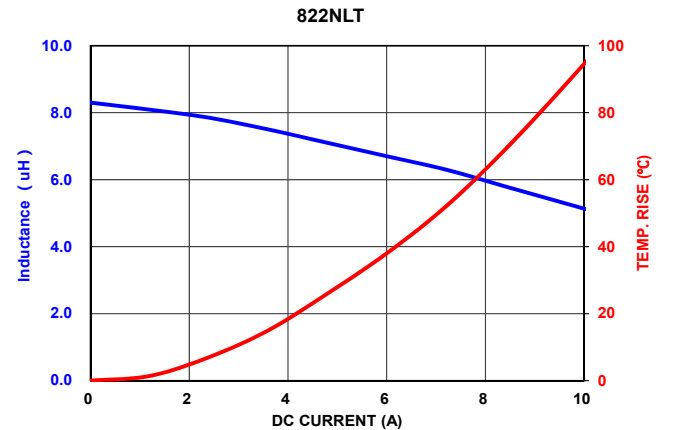
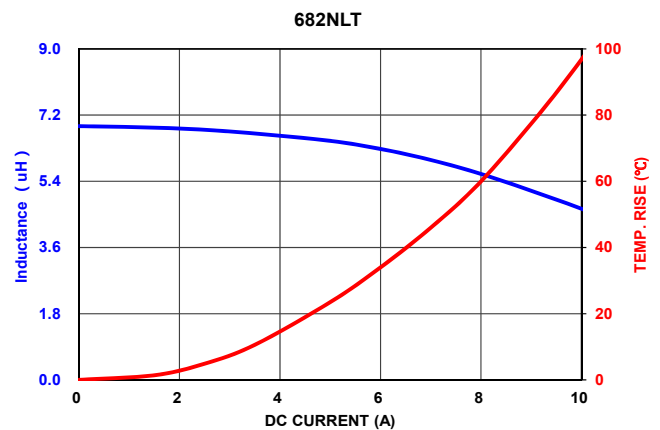
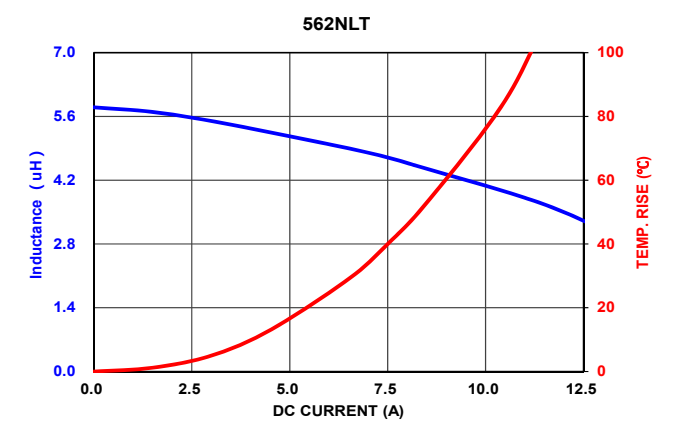
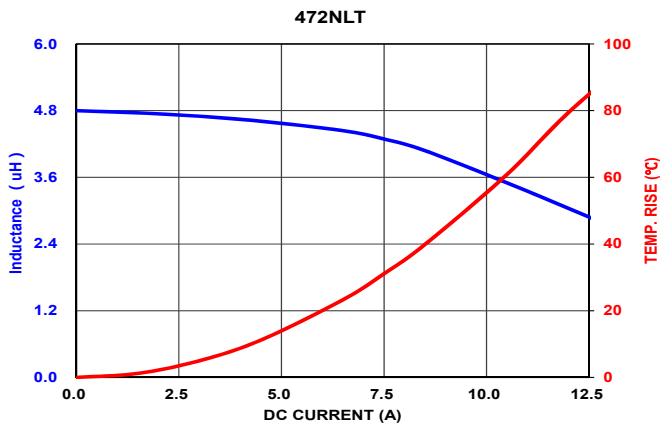
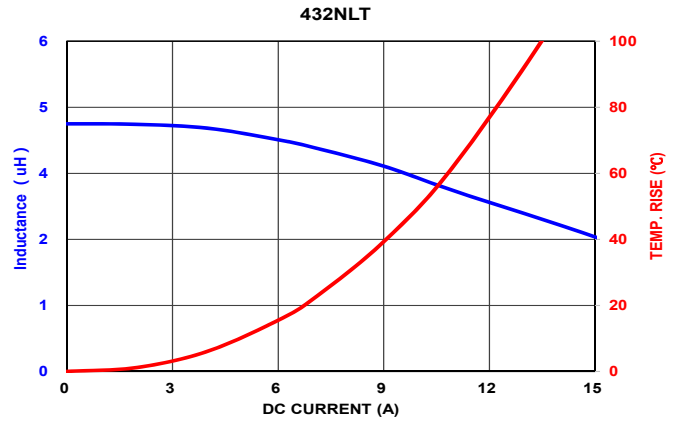
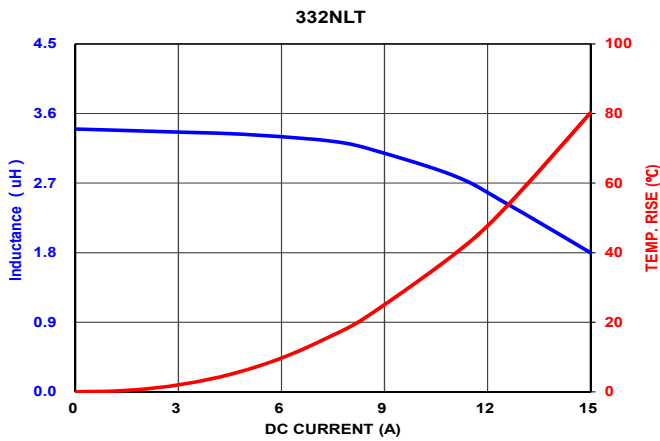


## Typical Performance Curves



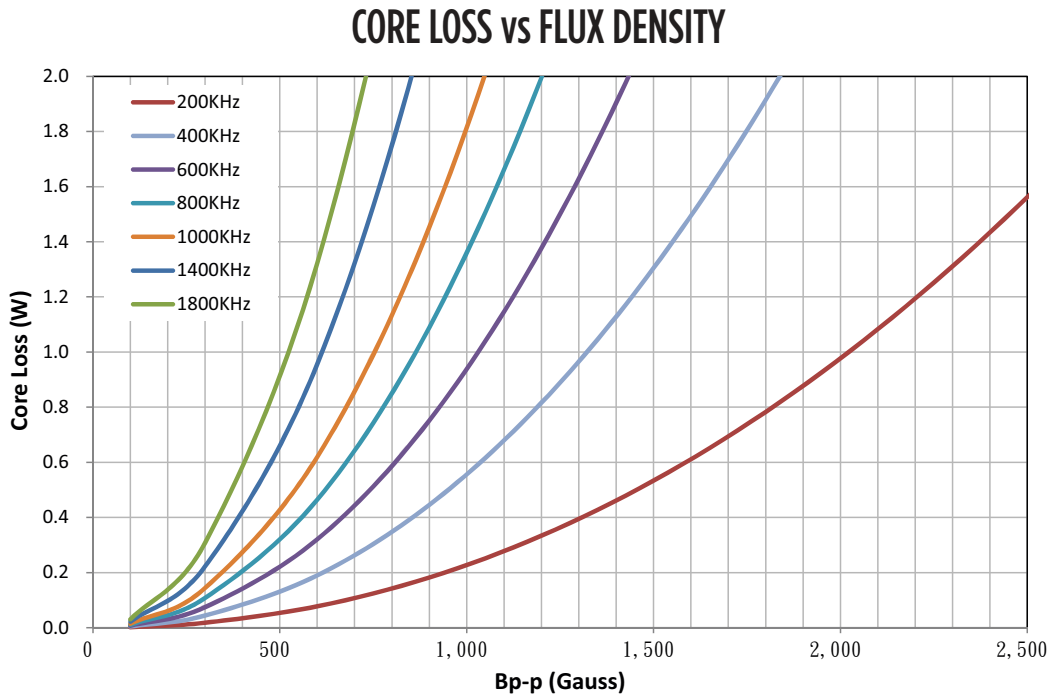
# SMT Power Inductors

High Current Composite Inductor - PA5005.XXXNLT and PM2205.XXXNLT



# SMT Power Inductor

High Current Composite Inductor - PA5005.XXXNLT and PM2205.XXXNLT



$$B_{p-p} = K * L(\mu H) * \Delta I(A)$$

## 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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