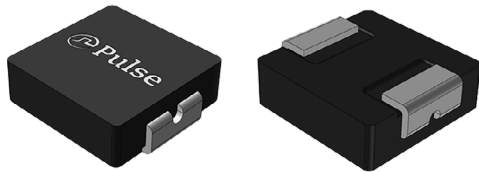


# SMT Power Inductor

Molded Power Inductor - PA5449.XXXNLT and PM5449.XXXNLT



- Ⓢ **Height: 4.0mm Max**
- Ⓢ **Footprint: 9.2mm x 8.5mm Max**
- Ⓢ **Current Rating: up to 36A**
- Ⓢ **Inductance Range: 0.22uH to 47uH**
- Ⓢ **High current, low DCR, and high efficiency**
- Ⓢ **Shielded construction and compact design**
- Ⓢ **Minimized acoustic noise and minimized leakage flux noise**
- Ⓢ **Available in Commercial (PA) and automotive (PM) grades**

## Electrical Specifications @ 25°C - Operating Temperature -55C to 125C

Commerical <sup>6,7</sup>	Automotive <sup>6,7</sup>	Inductance 100KHz, 1.0V  uH±20%	Rated <sup>5</sup> Current	DC Resistance		Saturation <sup>2</sup> Current
			TYP.	TYP.	MAX.	TYP.
			A	mΩ	mΩ	A
PA5449.221NLT	PM5449.221NLT	0.22	30	1.6	1.8	55
PA5449.331NLT	PM5449.331NLT	0.33	25	2	2.4	40
PA5449.471NLT	PM5449.471NLT	0.47	25	2.5	2.8	36
PA5449.561NLT	PM5449.561NLT	0.56	22	2.8	3.2	23
PA5449.681NLT	PM5449.681NLT	0.68	21	3.4	3.8	22
PA5449.821NLT	PM5449.821NLT	0.82	19	4	4.4	19
PA5449.102NLT	PM5449.102NLT	1.0	17	4.2	4.62	17
PA5449.152NLT	PM5449.152NLT	1.5	15	6.9	7.6	15
PA5449.182NLT	PM5449.182NLT	1.8	12.5	9.2	11	13.5
PA5449.222NLT	PM5449.222NLT	2.2	12	10.3	11.4	12
PA5449.332NLT	PM5449.332NLT	3.3	10	13	15	11
PA5449.472NLT	PM5449.472NLT	4.7	8.5	23	26.5	10.5
PA5449.562NLT	PM5449.562NLT	5.6	8.0	25	30	10
PA5449.682NLT	PM5449.682NLT	6.8	7.0	32	36.8	8
PA5449.822NLT	PM5449.822NLT	8.2	6.0	40	46	7.7
PA5449.103NLT	PM5449.103NLT	10	5.5	51	59	7
PA5449.153NLT	PM5449.153NLT	15	4.8	61	71	4.9
PA5449.223NLT	PM5449.223NLT	22	4.2	98	113	4.5
PA5449.333NLT	PM5449.333NLT	33	3.0	135	156	3.3
PA5449.473NLT	PM5449.473NLT	47	2.5	195	225	2.9

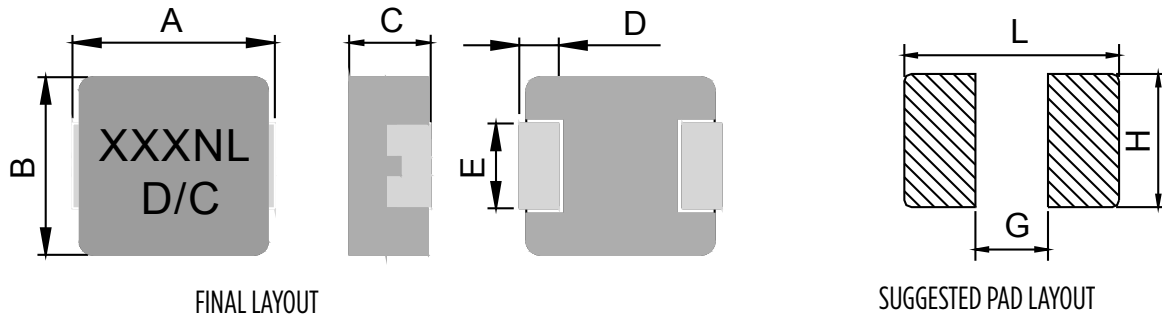
# SMT Power Inductor

Molded Power Inductor - PA5449.XXXNLT and PM5449.XXXNLT

- 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 drops approximately 30% at the stated ambient temperature. 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.
  - 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.
  - 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 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 availability.
  - 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 (V)

## Mechanical

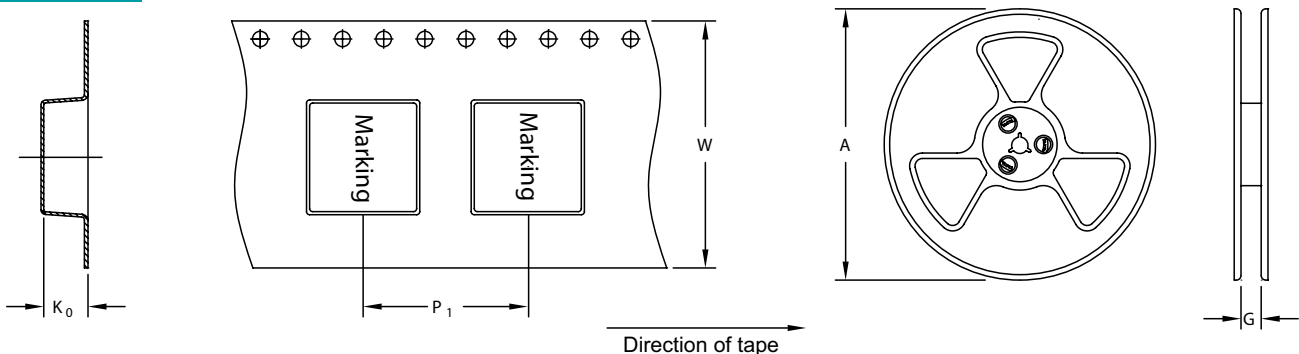
### PA5449/PM5449



Series	A	B	C	D	E	L	G	H
<b>PA5449/PM5449</b>	8.8±0.4	8.2±0.3	3.8±0.2	1.4±0.3	5.0±0.3	9.5	4.0	5.5

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
<b>PA5449/PM5449</b>	Ø330	16.4	16	24	4.5	800

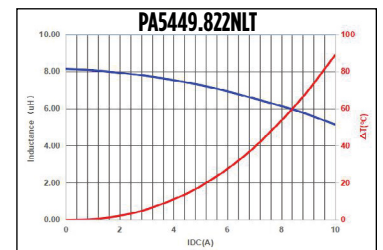
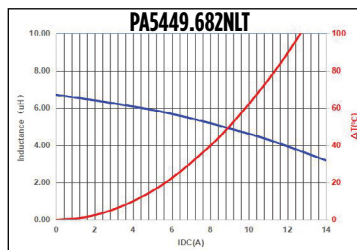
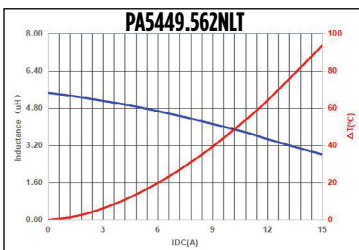
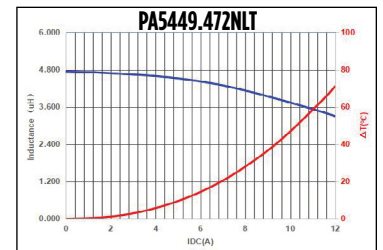
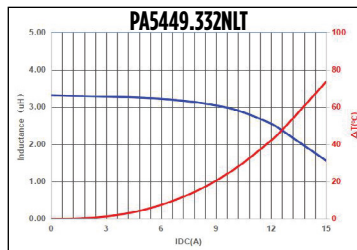
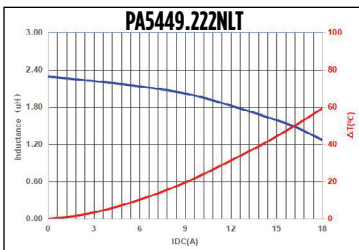
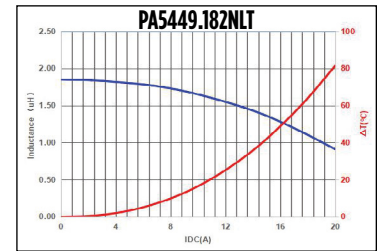
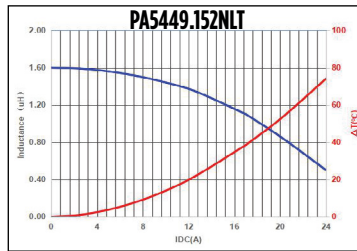
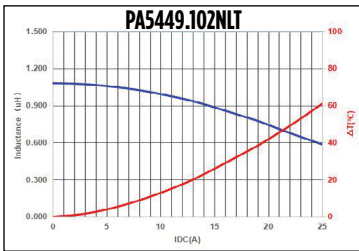
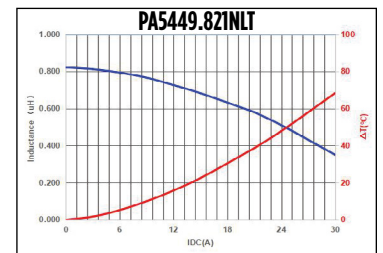
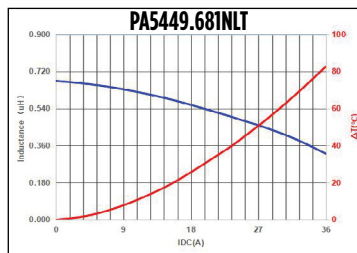
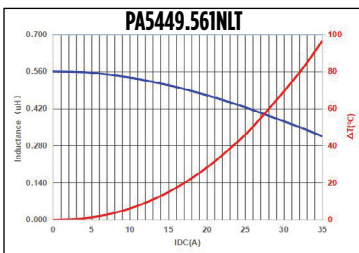
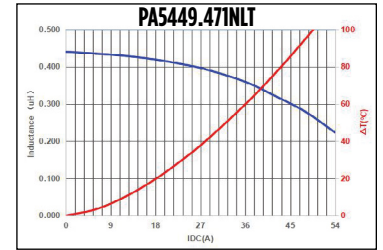
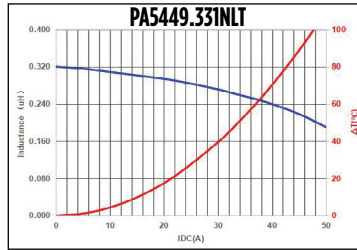
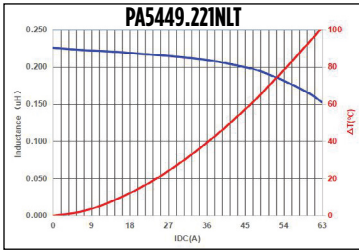
# SMT Power Inductor

Molded Power Inductor - PA5449.XXXNLT and PM5449.XXXNLT



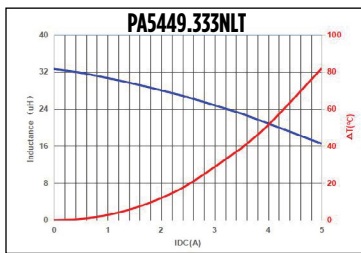
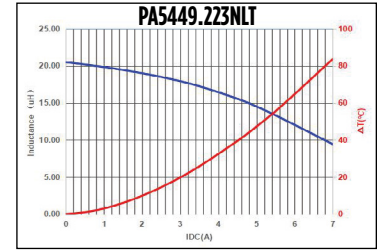
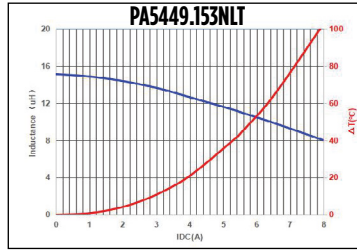
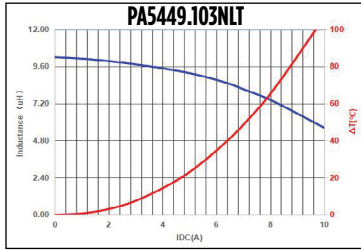
## Typical Performance Curves

### PA5449/PM5449



# SMT Power Inductor

Molded Power Inductor - PA5449.XXXNLT and PM5449.XXXNLT



## 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)

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2020. Pulse Electronics, Inc. All rights reserved.