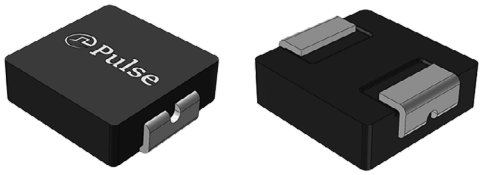
SMT Power Inductor

High Current Molded Power Inductor - PA4547 & PM4547 Series

Pulse
A YAGEO Company
POWER PRODUCTS





- ***Height:*** *1.5mm Max*
- ***Footprint:*** *3.8mm x 3.4mm Max*
- ***Current Rating:*** *up to 7.0A*
- ***Inductance Range:*** *0.22uH to 10.0uH*
- *High current, low DCR, and high efficiency*
- *High reliability*
- *Minimized acoustic noise and minimized leakage flux noise*
- *200Vdc Isolation between terminal and core*

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

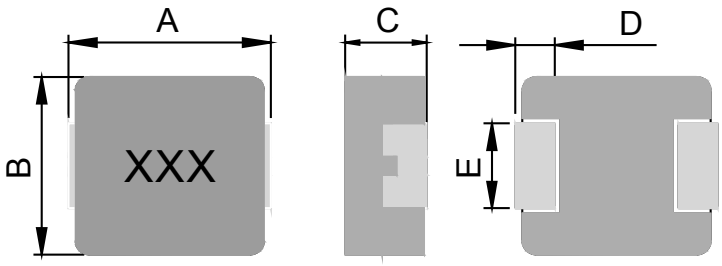
Commercial[5,6]	Automotive[5,6]	▽ Inductance[5] 100KHz, 1.0V	Rated[3] Current	DC Resistance		Saturation[2] Current
				TYP.	MAX.	
		uH±20%	A	mΩ	mΩ	A
PA4547.221NLT	PM4547.221NLT	0.22	7.00	14	17	10.8
PA4547.471NLT	PM4547.471NLT	**0.47**	**5.50**	**23.3**	**28**	**8.0**
PA4547.561NLT	PM4547.561NLT	**0.56**	**5.00**	**28**	**33**	**7.2**
PA4547.681NLT	PM4547.681NLT	**0.68**	**4.50**	**34**	**42**	**6.5**
PA4547.102NLT	PM4547.102NLT	**1.00**	**3.60**	**41**	**50**	**5.8**
PA4547.152NLT	PM4547.152NLT	**1.50**	**3.40**	**64**	**77**	**4.0**
PA4547.222NLT	PM4547.222NLT	**2.20**	**3.20**	**82**	**98**	**3.8**
PA4547.332NLT	PM4547.332NLT	**3.30**	**2.50**	**170**	**205**	**3.2**
PA4547.472NLT	PM4547.472NLT	**4.70**	**1.90**	**220**	**264**	**2.8**
PA4547.562NLT	PM4547.562NLT	**5.60**	**1.70**	**265**	**318**	**2.3**
PA4547.682NLT	PM4547.682NLT	**6.80**	**1.50**	**290**	**348**	**2.0**
PA4547.822NLT	PM4547.822NLT	**8.20**	**1.30**	**390**	**468**	**1.8**
PA4547.103NLT	PM4547.103NLT	**10.00**	**1.20**	**435**	**522**	**1.6**

Notes:

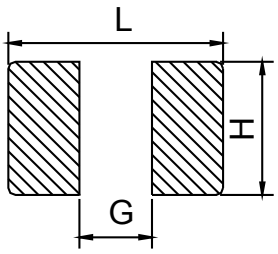
1. Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
2. The saturation current is the current at which the initial inductance drops approximately 30% at the stated ambient temperature. This current is determined by 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 those indicated with a * 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. Both the PA and PM part numbers are AEC-Q200 qualified parts. The PM part numbers have full automotive IATF16949 certification. The PM part number 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.
8. Special characteristics ▽

Mechanical

PA4547/PM4547



FINAL LAYOUT

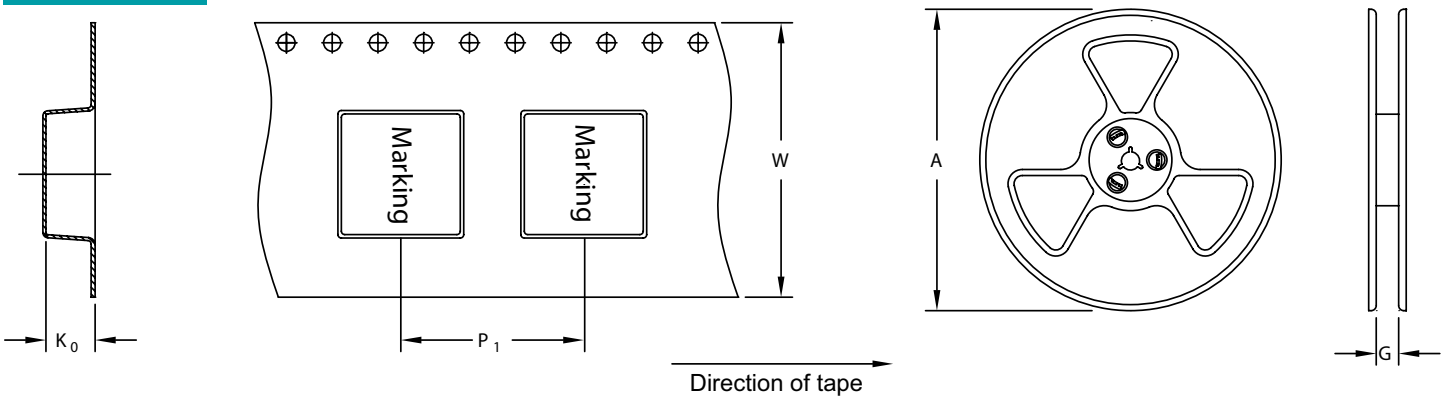


SUGGESTED PAD LAYOUT

Series	A	B	C	D	E	L	G	H
PA4547/PM4547	3.5±0.3	3.2±0.2	1.3±0.2	0.7±0.2	1.2±0.2	4.1	1.9	1.45

All Dimensions in mm.

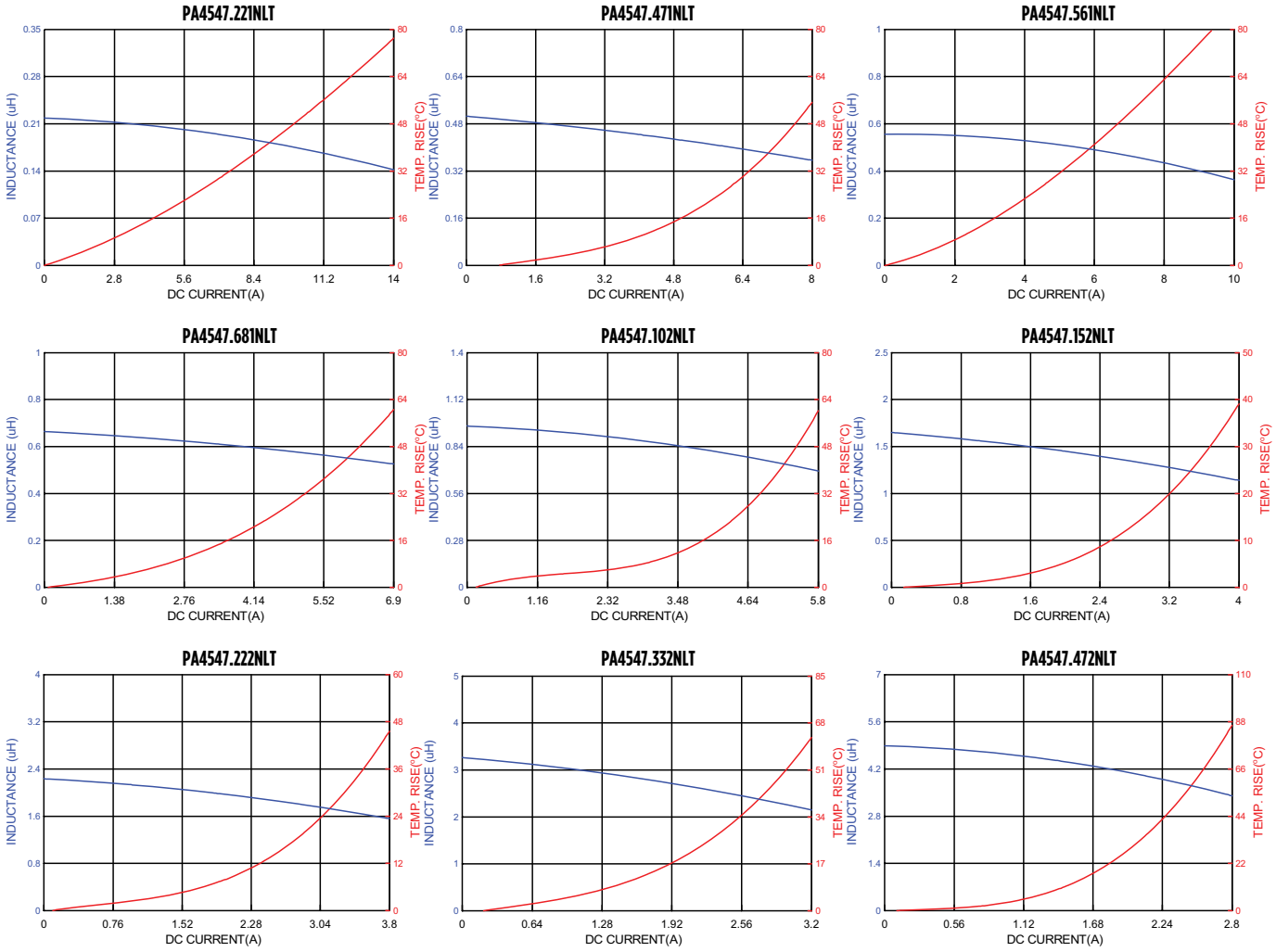
TAPE & REEL INFO



SURFACE MOUNTING TYPE, REEL/TAPE LIST						
	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P_1	W	K_0	PCS/REEL
PA4547/PM4547	Ø330	12.4	8	12	1.8	3000

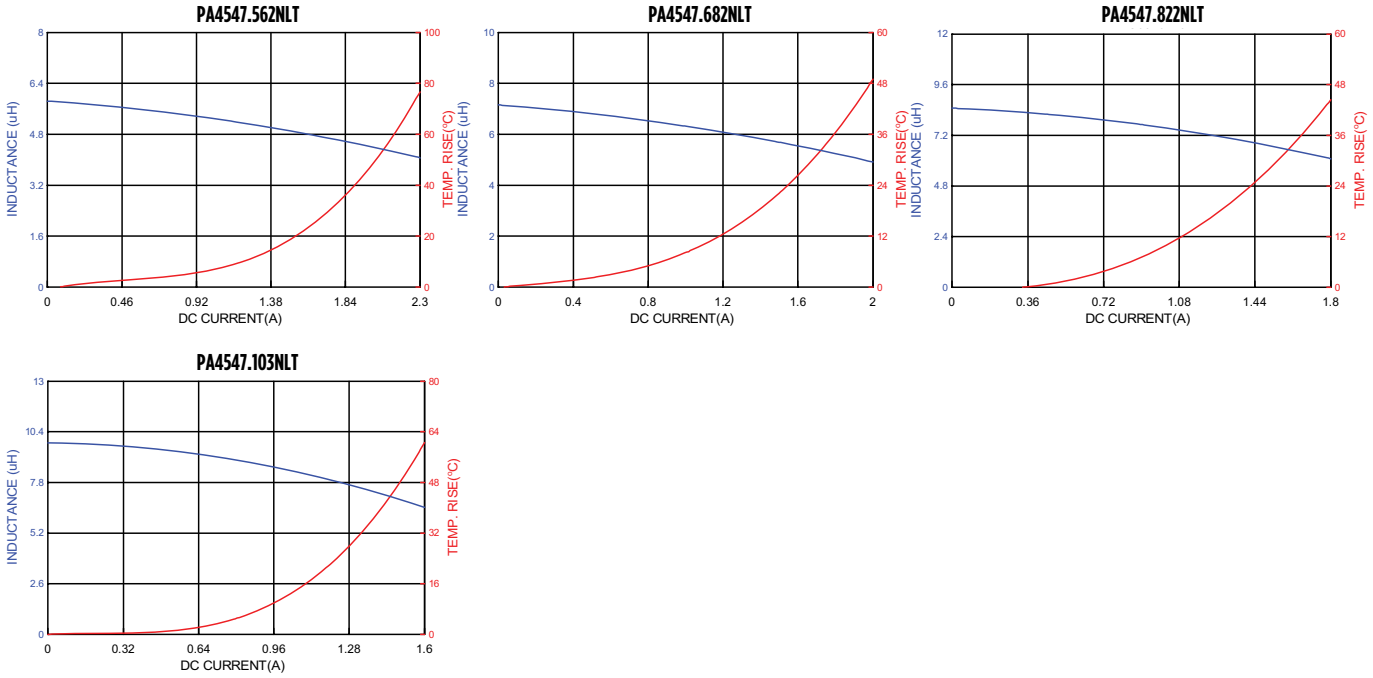
Typical Performance Curves

PA4547.XXXNLT



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For More Information:

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