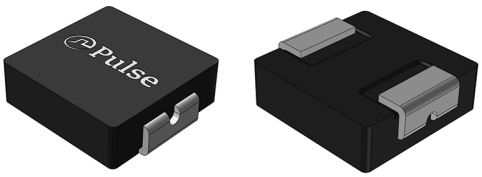
SMT Power Inductors

High Current Molded Power Inductor - PA4548.XXXNLT Series

Pulse
a YAGEO company



- ***Height:*** *2.4mm Max*
- ***Footprint:*** *7.3mm x 6.9mm Max*
- ***Current Rating:*** *up to 30A*
- ***Inductance Range:*** *0.10uH to 22.0uH*
- *High current, low DCR, and high efficiency*
- *High reliability*
- *Minimized acoustic noise and minimized leakage flux noise*
- *200 Vdc Isolation Between Terminal and Core*

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

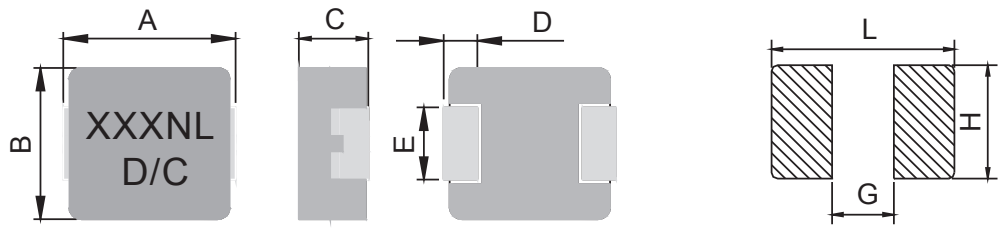
Commercial[6,7]	Automotive[6,7]	Inductance[5] 100KHz, 1.0V	Rated[3] Current	DC Resistance		Saturation[2] Current
			TYP.	TYP.	MAX.	TYP.
		uH±20%	A	mΩ	mΩ	A
PA4548.101NLT	PM4548.101NLT	0.10*	30	1.4	1.7	70
PA4548.151NLT	PM4548.151NLT	0.15*	30	1.8	2.3	45
PA4548.201NLT	PA4548.201NLT	0.20	23	1.9	2.8	40
PA4548.221NLT	**PM4548.221NLT**	**0.22**	**21**	**2**	**3.2**	**34**
PA4548.331NLT	**PM4548.331NLT**	**0.33**	**18**	**3.6**	**4.4**	**30**
PA4548.361NLT	PA4548.361NLT	0.36	17	3.8	4.6	29
PA4548.471NLT	**PM4548.471NLT**	**0.47**	**15**	**4.8**	**5.1**	**26**
PA4548.561NLT	**PM4548.561NLT**	**0.56**	**13**	**5.5**	**6.5**	**24**
PA4548.601NLT	PA4548.601NLT	0.60	13	5.7	6.9	22
PA4548.681NLT	**PM4548.681NLT**	**0.68**	**13**	**6.4**	**7.2**	**21**
PA4548.821NLT	**PM4548.821NLT**	**0.82**	**11**	**8**	**9.5**	**17**
PA4548.102NLT	**PM4548.102NLT**	**1.0**	**11**	**10.5**	**13.5**	**16**
PA4548.152NLT	**PM4548.152NLT**	**1.5**	**9**	**17**	**20**	**15**
PA4548.222NLT	**PM4548.222NLT**	**2.2**	**7**	**23**	**28**	**14**
PA4548.332NLT	**PM4548.332NLT**	**3.3**	**6**	**34**	**39**	**10**
PA4548.472NLT	**PM4548.472NLT**	**4.7**	**5.5**	**41**	**50**	**9**
PA4548.562NLT	**PM4548.562NLT**	**5.6**	**5**	**56**	**62**	**8**
PA4548.682NLT	**PM4548.682NLT**	**6.8**	**4**	**65**	**72**	**7**
PA4548.822NLT	**PM4548.822NLT**	**8.2**	**3.6**	**81**	**95**	**6**
PA4548.103NLT	**PM4548.103NLT**	**10**	**3.2**	**92**	**101**	**5**
PA4548.153NLT	**PM4548.153NLT**	**15**	**2.5**	**150**	**180**	**3.5**
PA4548.223NLT	**PM4548.223NLT**	**22**	**1.8**	**185**	**215**	**3**

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' 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.
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. The PA4548.XXXNLT and PM4548.XXXNLT are both AEC-Q200 qualified. The PM4548.XXXNLT part numbers are also IATF16949 certified. The mechanical dimensions are 100% tested in production but do not necessarily meet a product capability index (Cpk) 1.33 and therefore the PM4548.XXXNLT may not strictly conform to PPAP.
8. Special Characteristics ▽

Mechanical

PA4548/PM4548



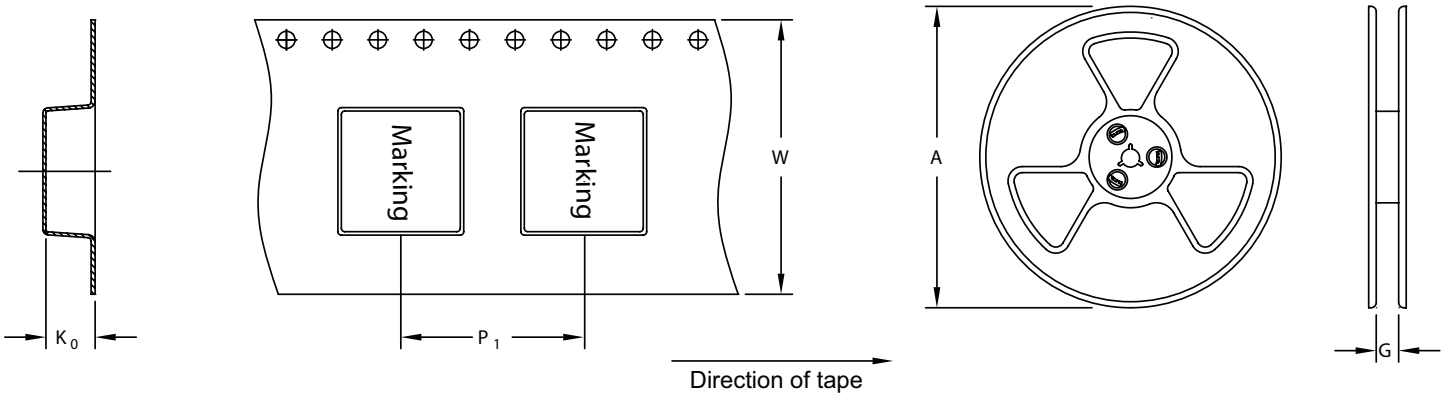
FINAL LAYOUT

SUGGESTED PAD LAYOUT

Series	A	B	C	D	E	L	G	H
PA4548/PM4548	7.0±0.3	6.6±0.3	2.2±0.2	1.8±0.3	3.0±0.3	7.7	2.5	3.5

All Dimensions in mm.

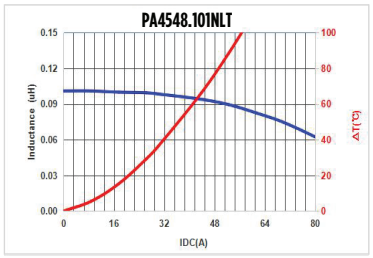
TAPE & REEL INFO

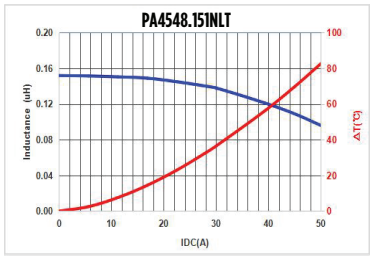


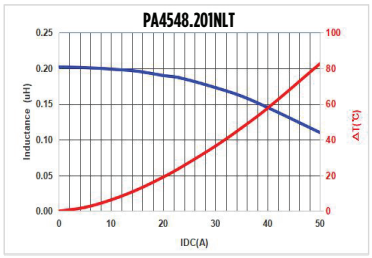
SURFACE MOUNTING TYPE, REEL/TAPE LIST						
	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P_1	W	K_0	PCS/REEL
PA4548/PM4548	Ø330	16.4	12	16	2.7	1500

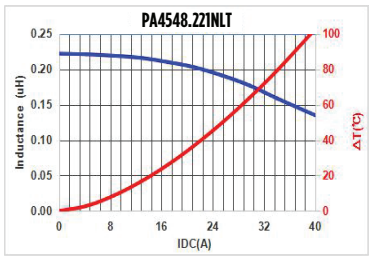
Typical Performance Curves

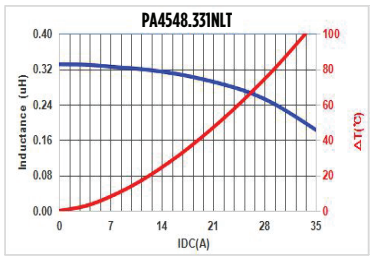
PA4548.XXXNLT

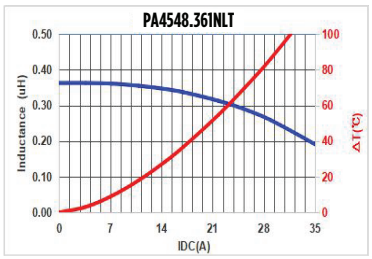


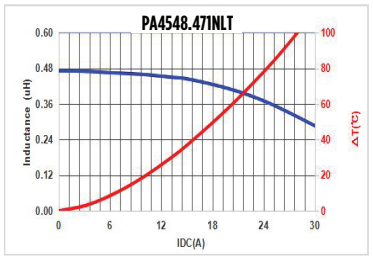


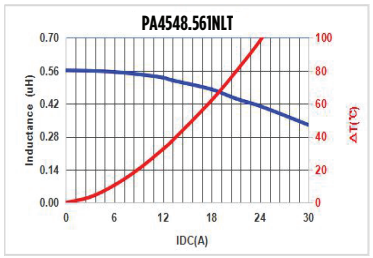


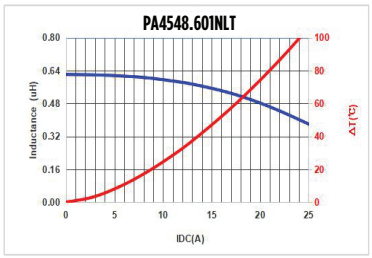


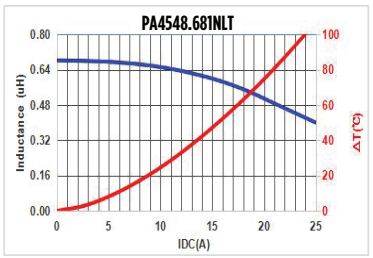


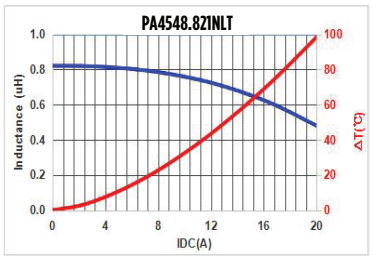


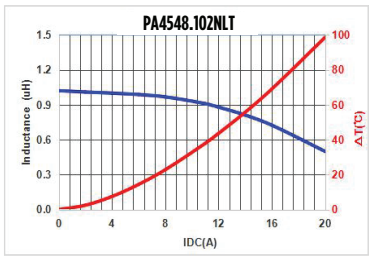


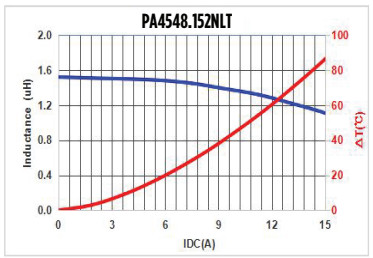


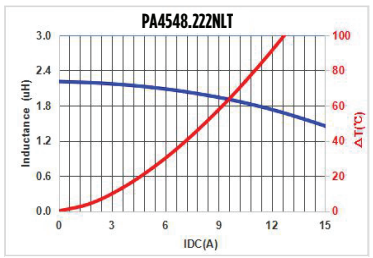


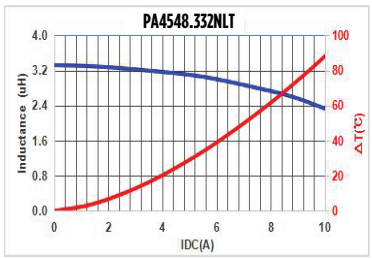






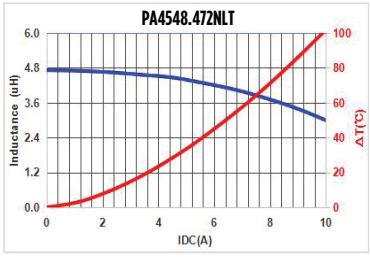


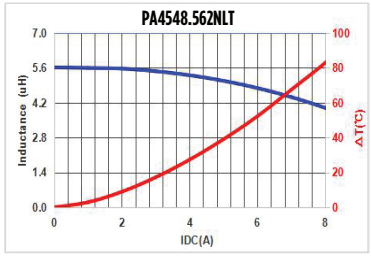


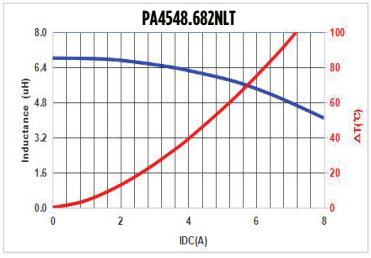


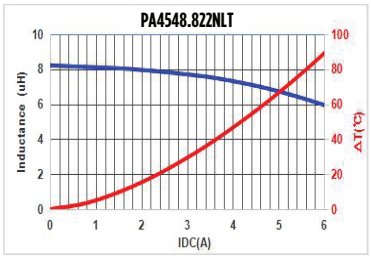
SMT Power Inductors

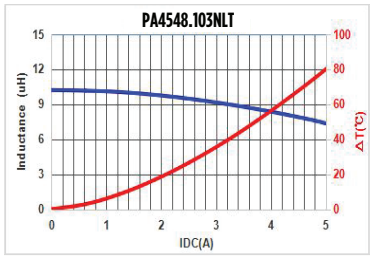
High Current Molded Power Inductor - PA4548.XXXNLT Series

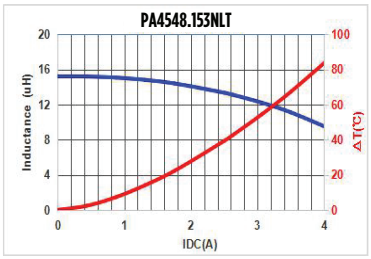


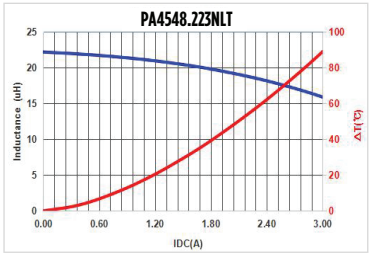












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