

PM4548.471NLT Datasheet

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DiGi Electronics Part Number	PM4548.471NLT-DG
Manufacturer	Pulse Electronics
Manufacturer Product Number	PM4548.471NLT
Description	FIXED IND 470NH 15A 5.1 MOHM SMD
Detailed Description	470 nH Unshielded Molded Inductor 15 A 5.1mOhm Max Nonstandard



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DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

PM4548.471NLT

Series:

PM4548.XXXNLT

Type:

Molded

Inductance:

470 nH

Current Rating (Amps):

15 A

Shielding:

Unshielded

Q @ Freq:

-

Ratings:

AEC-Q200

Inductance Frequency - Test:

100 kHz

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.118" (3.00mm)

Manufacturer:

Pulse Electronics

Product Status:

Active

Material - Core:

-

Tolerance:

±20%

Current - Saturation (Isat):

26A

DC Resistance (DCR):

5.1mOhm Max

Frequency - Self Resonant:

-

Operating Temperature:

-55°C ~ 125°C

Features:

-

Package / Case:

Nonstandard

Size / Dimension:

0.299" L x 0.272" W (7.60mm x 6.90mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

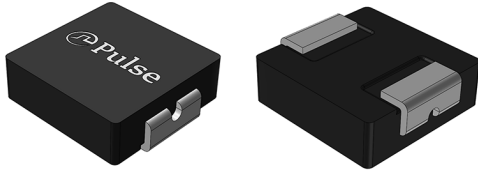
1 (Unlimited)

ECCN:

EAR99

SMT Power Inductors

High Current Molded Power Inductor - PA4548.XXXNLT Series



- Ⓟ **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 ^{1,6,7}	Automotive ^{6,7}	Inductance ⁵ 100KHz, 1.0V uH±20%	Rated ⁵ Current	DC Resistance		Saturation ² Current
			TYP.	TYP.	MAX.	TYP.
			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

SMT Power Inductors

High Current Molded Power Inductor - PA4548.XXXNLT Series

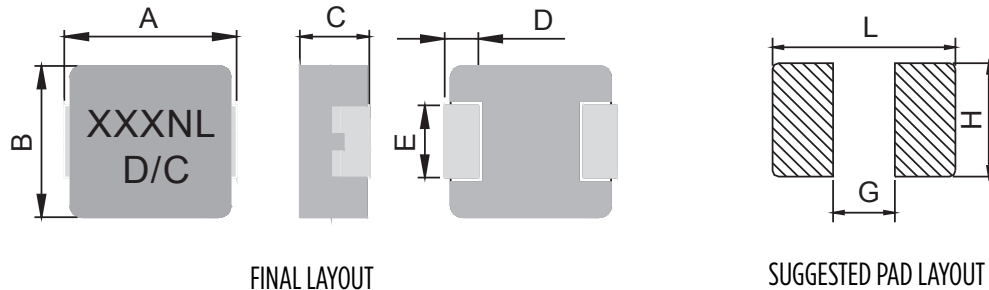


Notes:

- 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 with a * 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 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.
- Special Characteristics

Mechanical

PA4548/PM4548



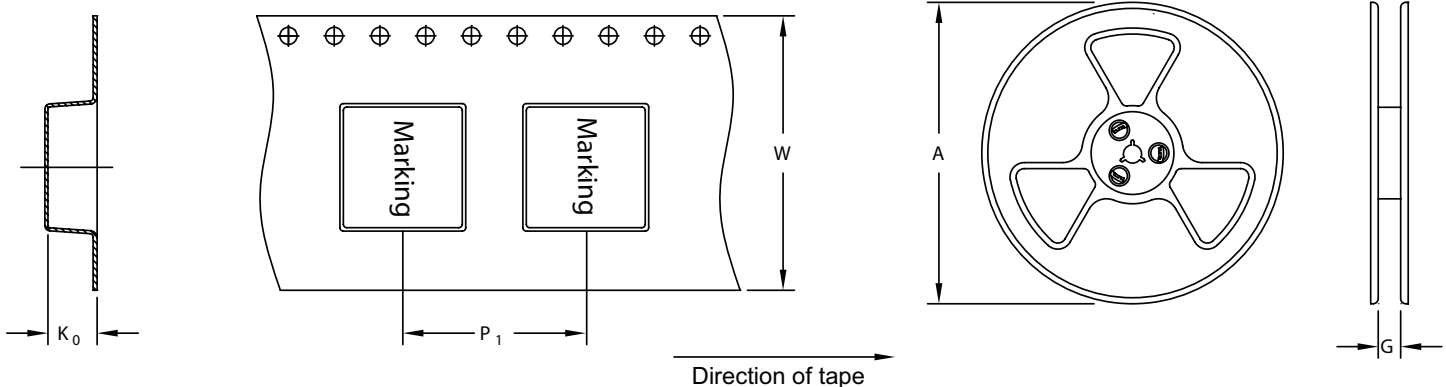
FINAL LAYOUT

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

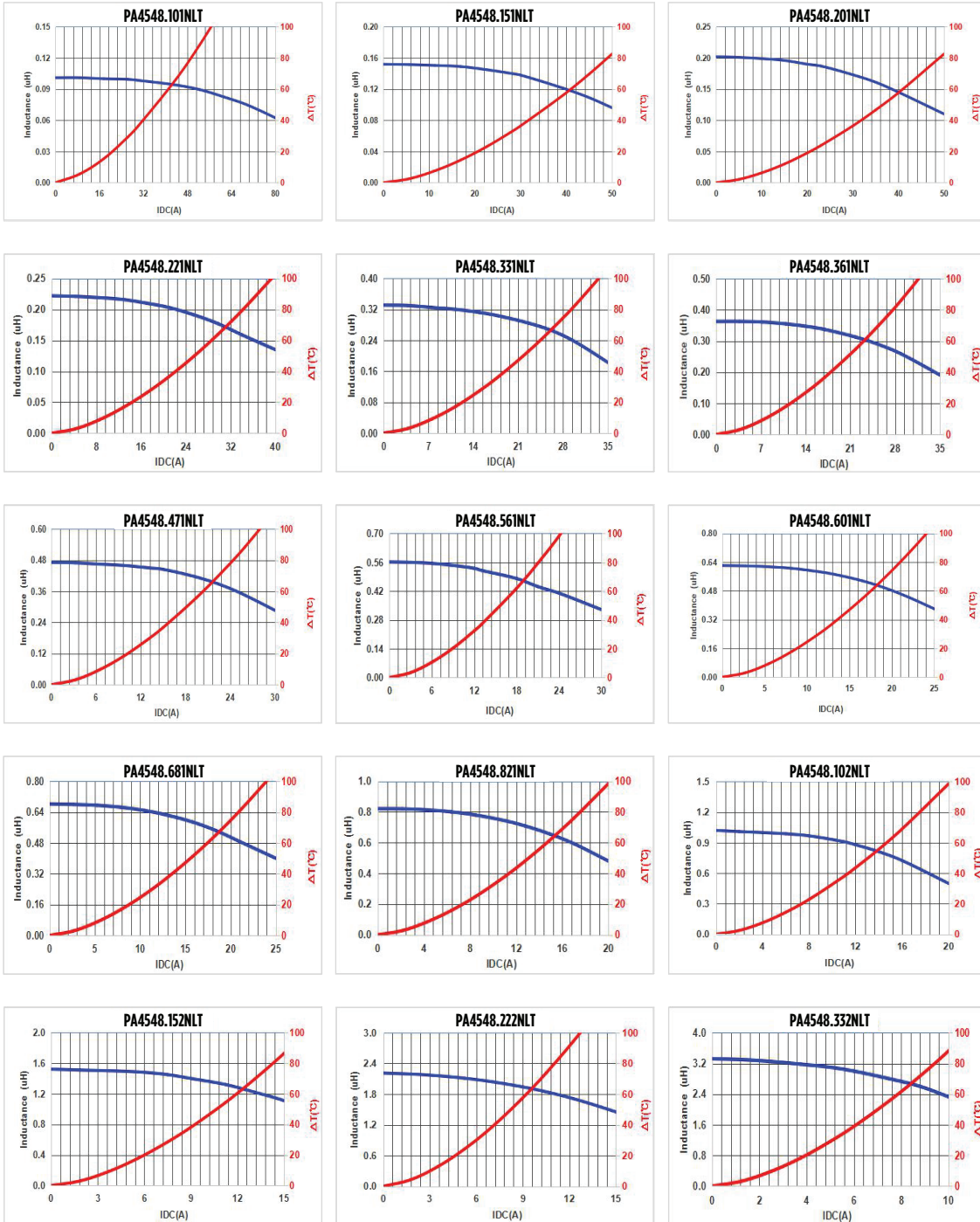
SMT Power Inductors

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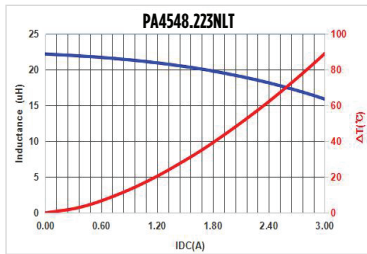
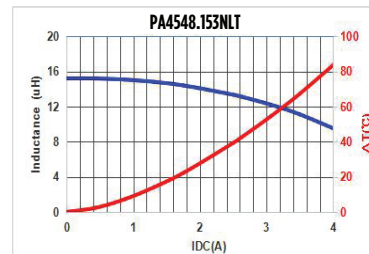
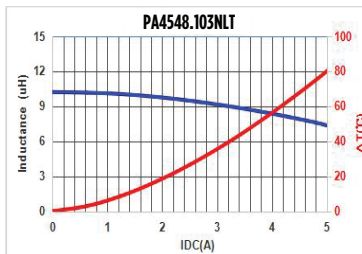
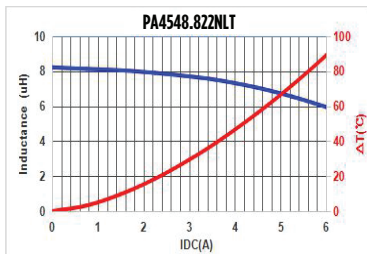
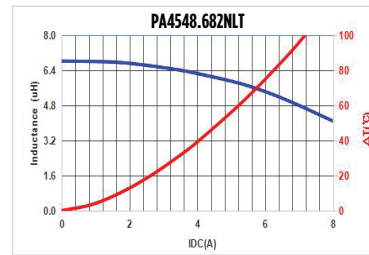
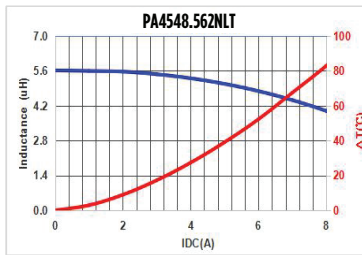
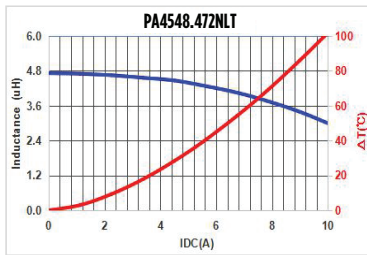
Typical Performance Curves

PA4548.XXXNLT



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For More Information:

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