SMT Power Inductor

High Current Molded Power Inductor - PA4341.XXXNLT & PM4341.XXXNLT

Pulse a YAGEO company POWER



- ***Height:*** *3.0mm Max*
- ***Footprint:*** *7.6mm x 6.9mm Max*
- ***Current Rating:*** *up to 32.5A*
- ***Inductance Range:*** *0.1uH to 47.0uH*
- *Shielded construction and compact design*
- *High current, low DCR, and high efficiency*
- *Minimized acoustic noise and minimized leakage flux*
- *200Vdc 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, 1V	Rated[3] Current	DC Resistance		Saturation[2] Current
				TYP.	MAX.	
		(uH ±20%)	A	mΩ	mΩ	A
PA4341.101NLT	PM4341.101NLT	**0.10***	**32.5**	**1.2**	**1.7**	**60**
PA4341.131NLT	**PM4341.131NLT**	0.13*	27.6	1.3	1.8	50
PA4341.151NLT	PM4341.151NLT	**.15***	**27**	**1.5**	**1.9**	**45**
PA4341.161NLT	PM4341.161NLT	**.16***	**27**	**1.5**	**1.9**	**45**
PA4341.181NLT	**PM4341.181NLT**	.18*	25	1.7	2.3	43
PA4341.191NLT	PM4341.191NLT	.19*	24	1.8	2.5	41
PA4341.201NLT	PM4341.201NLT	**.20***	**24**	**1.8**	**2.5**	**41**
PA4341.221NLT	PM4341.221NLT	**.22***	**23**	**2.1**	**2.8**	**40**
PA4341.241NLT	**PM4341.241NLT**	.24	22	2.5	3.1	39
PA4341.251NLT	**PM4341.251NLT**	.25	21	3.3	3.5	39
PA4341.301NLT	PM4341.301NLT	**0.30**	**21**	**3.2**	**3.8**	**35**
PA4341.331NLT	PM4341.331NLT	**0.33**	**20**	**3.5**	**3.9**	**32**
PA4341.361NLT	PM4341.361NLT	**0.36**	**19**	**3.6**	**4.2**	**32**
PA4341.471NLT	PM4341.471NLT	**0.47**	**17.5**	**4.0**	**4.2**	**26**
PA4341.561NLT	PM4341.561NLT	**0.56**	**16.5**	**4.7**	**5.0**	**25.5**
PA4341.601NLT	PM4341.601NLT	**0.60**	**16**	**4.7**	**5.2**	**25.5**
PA4341.681NLT	PM4341.681NLT	**0.68**	**15.5**	**4.8**	**5.5**	**25**
PA4341.751NLT	PM4341.751NLT	**0.75**	**14.5**	**5.5**	**6.6**	**24.5**
PA4341.821NLT	PM4341.821NLT	**0.82**	**13**	**6.7**	**8.0**	**24**
PA4341.901NLT	**PM4341.901NLT**	.90	11	8.3	10	22
PA4341.102NLT	PM4341.102NLT	**1.0**	**11**	**8.3**	**10**	**22**
PA4341.122NLT	PM4341.122NLT	**1.2**	**10**	**10**	**12**	**20**
PA4341.152NLT	PM4341.152NLT	**1.5**	**9.0**	**13**	**15**	**18**

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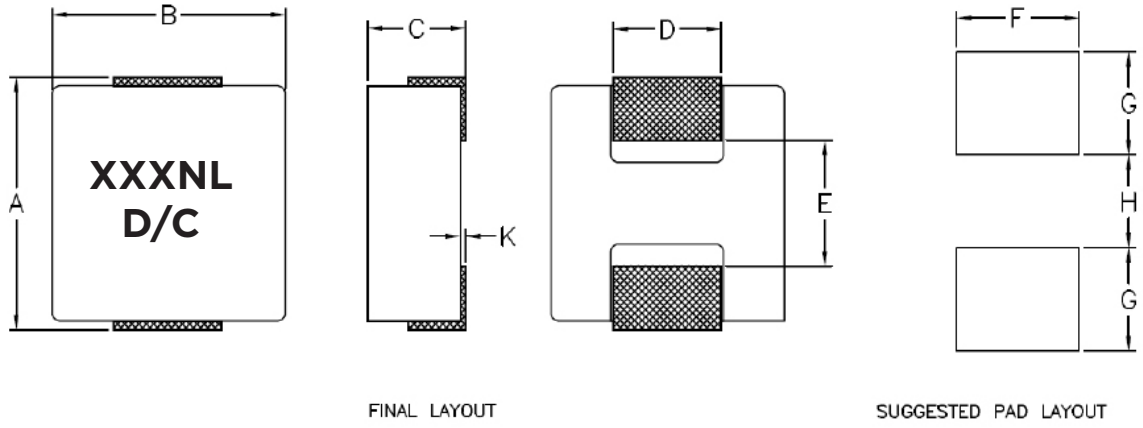
Electrical Specifications @ 25°C – Operating Temperature -55°C to +125°C						
Commercial[6,7]	Automotive[6,7]	▽ Inductance[5] 100KHz, 1V	Rated[3] Current	DC Resistance		Saturation[2] Current
				TYP.	MAX.	
		(uH ±20%)	A	mΩ	mΩ	A
PA4341.182NLT	PM4341.182NLT	**1.8**	**8.5**	**14**	**17**	**16**
PA4341.202NLT	PM4341.202NLT	**2.0**	**8.2**	**16**	**19**	**15**
PA4341.222NLT	PM4341.222NLT	**2.2**	**8.0**	**18**	**20**	**14**
PA4341.252NLT	PM4341.252NLT	**2.5**	**7.0**	**20**	**22**	**13**
PA4341.272NLT	**PM4341.272NLT**	2.7	7.0	24	27	13
PA4341.332NLT	PM4341.332NLT	**3.3**	**6.0**	**28**	**30**	**13.5**
PA4341.472NLT	PM4341.472NLT	**4.7**	**5.5**	**37**	**40**	**10**
PA4341.562NLT	PM4341.562NLT	**5.6**	**5.0**	**43**	**48**	**9.0**
PA4341.682NLT	PM4341.682NLT	**6.8**	**4.5**	**54**	**60**	**8.0**
PA4341.822NLT	PM4341.822NLT	**8.2**	**4.0**	**64**	**68**	**7.5**
PA4341.103NLT	PM4341.103NLT	**10**	**3.5**	**75**	**85**	**6.0**
PA4341.123NLT	PM4341.123NLT	**12**	**3.3**	**81**	**93**	**5.5**
PA4341.153NLT	PM4341.153NLT	15	3.0	107	123	4.0
PA4341.223NLT	PM4341.223NLT	**22**	**2.0**	**165**	**190**	**3.5**
PA4341.333NLT	PM4341.333NLT	33	2.0	200	240	2.5
PA4341.403NLT	PM4341.403NLT	40	1.9	283	340	2.3
PA4341.473NLT	PM4341.473NLT	**47**	**1.75**	**302**	**363**	**2.0**

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

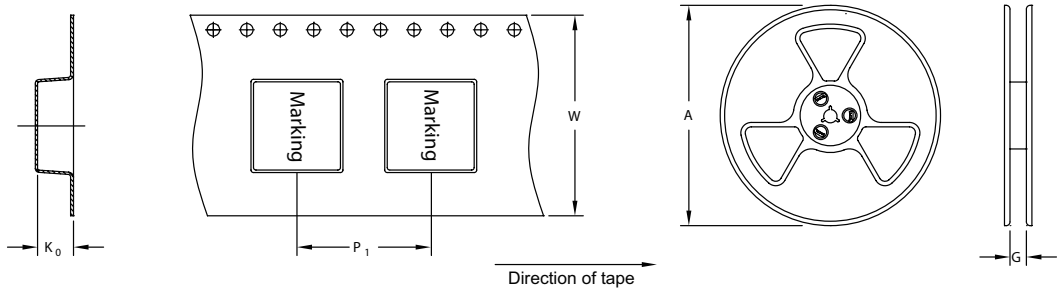
PA4341.XXXNLT and PM4341.XXXNLT



Series	A	B	C	D	E	F	G	H	K
PA4341/PM4341	7.6 MAX	6.9 MAX	3.0 MAX	(3.0)	(3.7)	(3.5)	(2.95)	(2.5)	(0~0.22)

All Dimensions in mm.

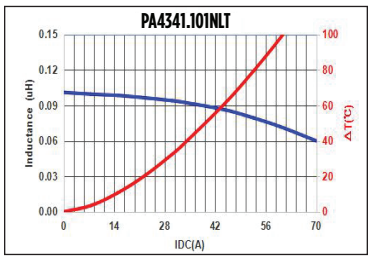
TAPE & REEL INFO

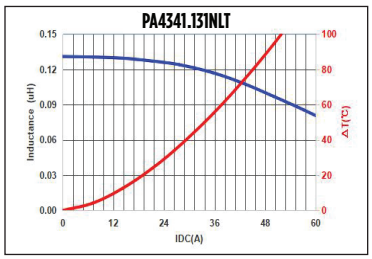


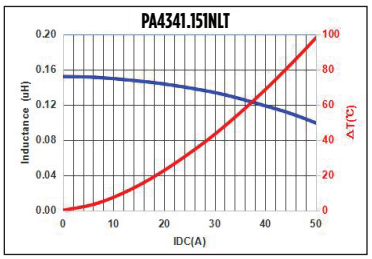
SURFACE MOUNTING TYPE, REEL/TAPE LIST						
	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P_1	W	K_0	PCS/REEL
PA4341/PM4341	Ø330	16	12	16	3.3	1000

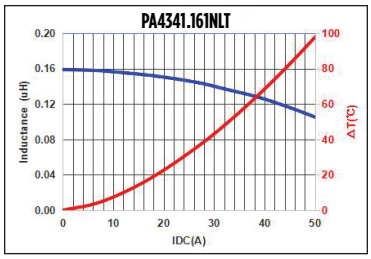
Typical Performance Curves

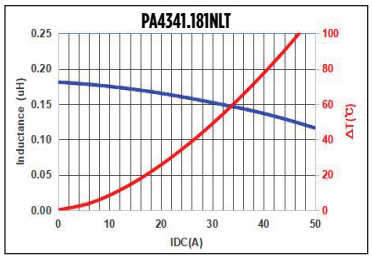
PA4341.XXXNLT and PM4341.XXXNLT

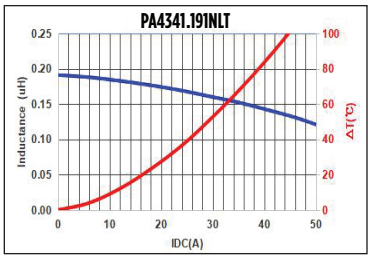


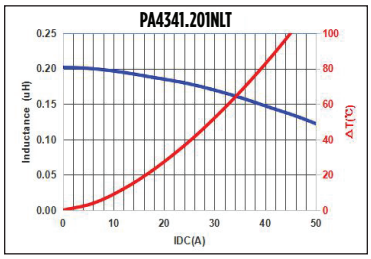


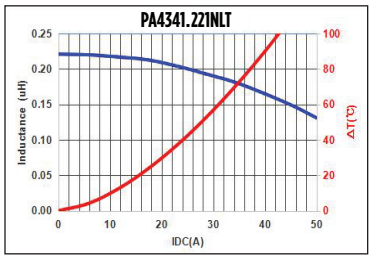


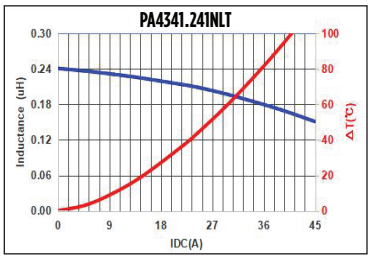


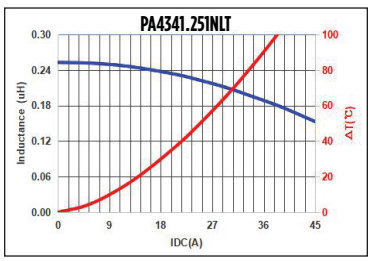


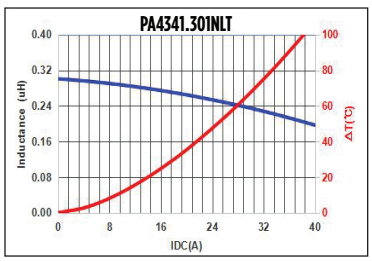


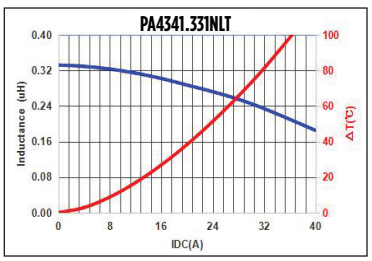


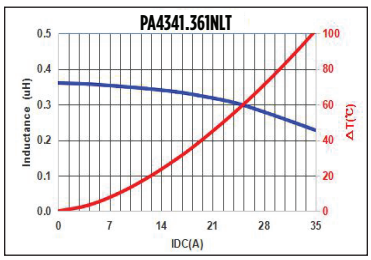


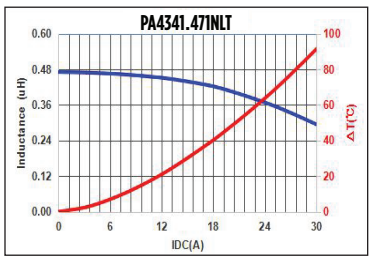


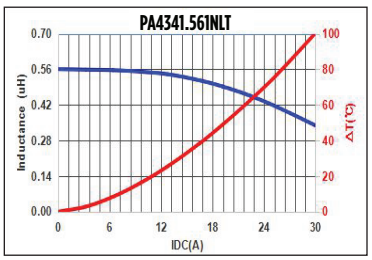


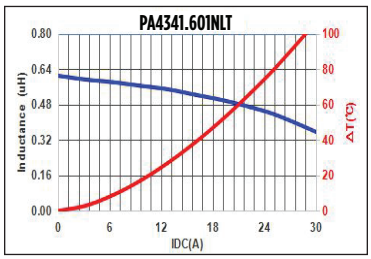


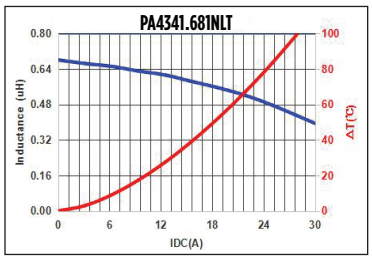


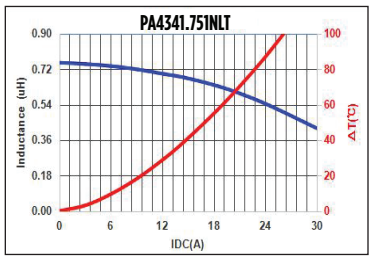


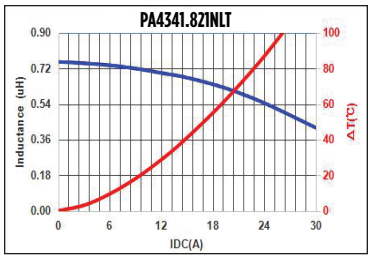


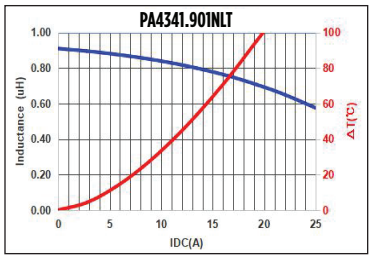


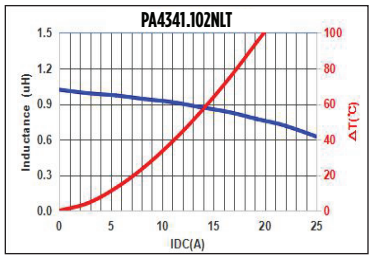

PA4341.601NLT
Inductance (uH)
0.80
0.64
0.48
0.32
0.16
0.00
0 6 12 18 24 30
IDC(A)
ΔT(℃)
100 80 60 40 20 0

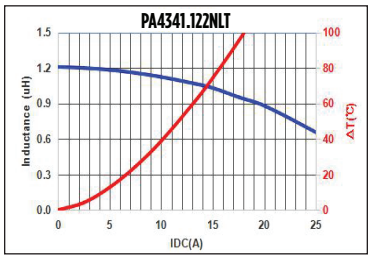

PA4341.681NLT
Inductance (uH)
0.80
0.64
0.48
0.32
0.16
0.00
0 6 12 18 24 30
IDC(A)
ΔT(℃)
100 80 60 40 20 0

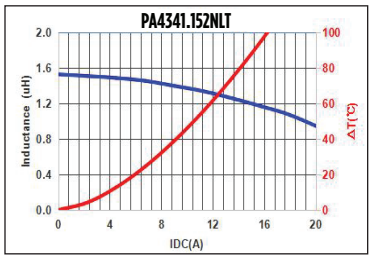

PA4341.751NLT
Inductance (uH)
0.90
0.72
0.54
0.36
0.18
0.00
0 6 12 18 24 30
IDC(A)
ΔT(℃)
100 80 60 40 20 0

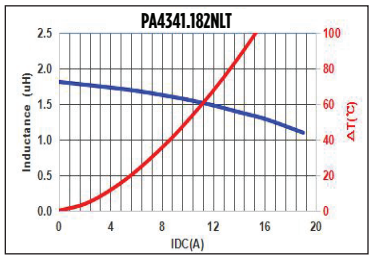

PA4341.821NLT
Inductance (uH)
0.90
0.72
0.54
0.36
0.18
0.00
0 6 12 18 24 30
IDC(A)
ΔT(℃)
100 80 60 40 20 0

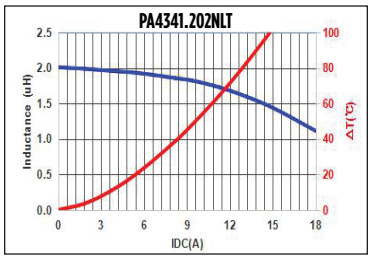

PA4341.901NLT
Inductance (uH)
1.00
0.80
0.60
0.40
0.20
0.00
0 5 10 15 20 25
IDC(A)
ΔT(℃)
100 80 60 40 20 0

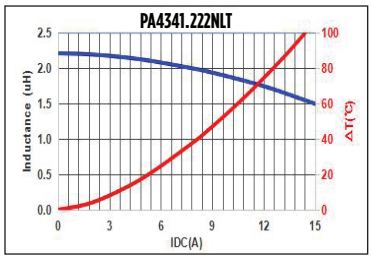

PA4341.102NLT
Inductance (uH)
1.5
1.2
0.9
0.6
0.3
0.0
0 5 10 15 20 25
IDC(A)
ΔT(℃)
100 80 60 40 20 0

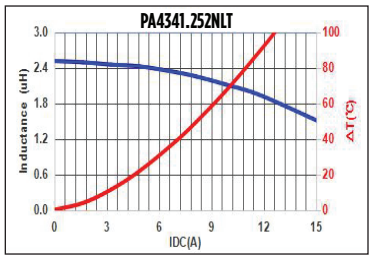

PA4341.122NLT
Inductance (uH)
1.5
1.2
0.9
0.6
0.3
0.0
0 5 10 15 20 25
IDC(A)
ΔT(℃)
100 80 60 40 20 0

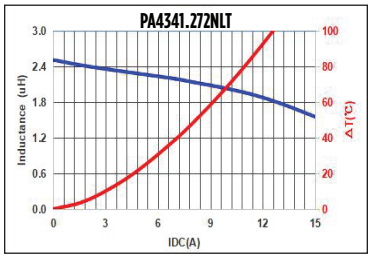

PA4341.152NLT
Inductance (uH)
2.0
1.6
1.2
0.8
0.4
0.0
0 4 8 12 16 20
IDC(A)
ΔT(℃)
100 80 60 40 20 0

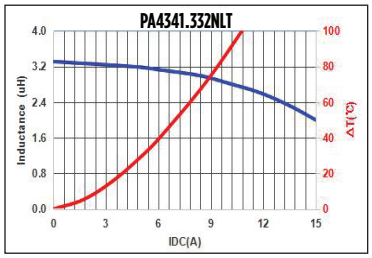

PA4341.182NLT
Inductance (uH)
2.5
2.0
1.5
1.0
0.5
0.0
0 4 8 12 16 20
IDC(A)
ΔT(℃)
100 80 60 40 20 0

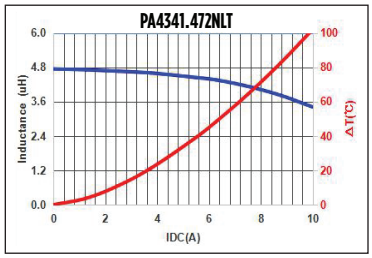

PA4341.202NLT
Inductance (uH)
2.5
2.0
1.5
1.0
0.5
0.0
0 3 6 9 12 15 18
IDC(A)
ΔT(℃)
100 80 60 40 20 0


PA4341.222NLT
Inductance (uH)
2.5
2.0
1.5
1.0
0.5
0.0
0 3 6 9 12 15
IDC(A)
ΔT(℃)
100 80 60 40 20 0


PA4341.252NLT
Inductance (uH)
3.0
2.4
1.8
1.2
0.6
0.0
0 3 6 9 12 15
IDC(A)
ΔT(℃)
100 80 60 40 20 0

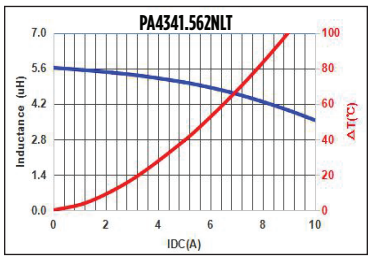

PA4341.272NLT
Inductance (uH)
3.0
2.4
1.8
1.2
0.6
0.0
0 3 6 9 12 15
IDC(A)
ΔT(℃)
100 80 60 40 20 0

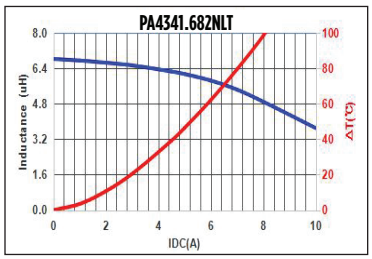

PA4341.332NLT
Inductance (uH)
4.0
3.2
2.4
1.6
0.8
0.0
0 3 6 9 12 15
IDC(A)
ΔT(℃)
100 80 60 40 20 0

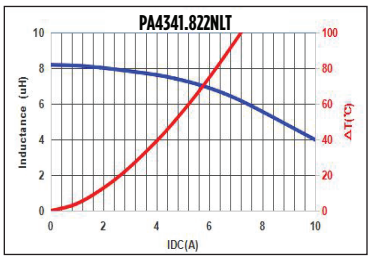

PA4341.472NLT
Inductance (uH)
6.0
4.8
3.6
2.4
1.2
0.0
0 2 4 6 8 10
IDC(A)
ΔT(℃)
100 80 60 40 20 0

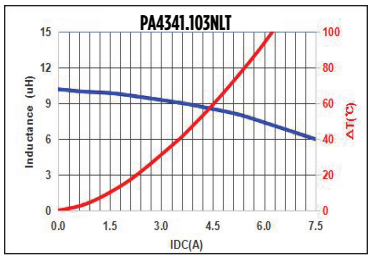
SMT Power Inductor

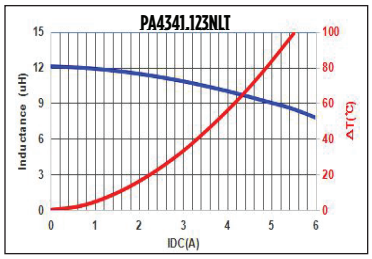
High Current Molded Power Inductor - PA4341.XXXNLT & PM4341.XXXNLT

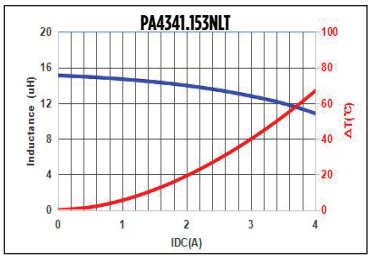


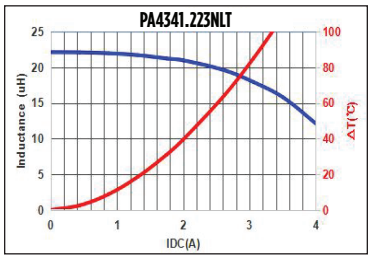


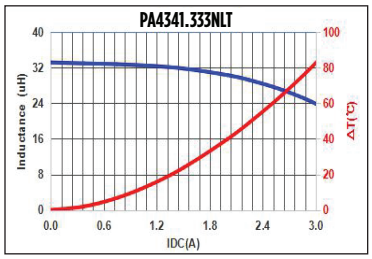


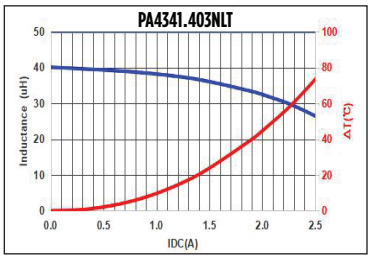


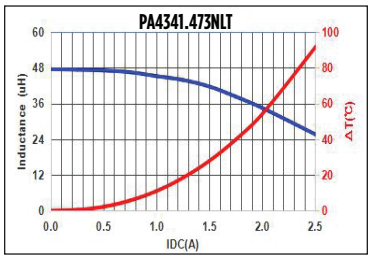












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