

Shielded Drum Core Inductor

PA4322, PA4318, PA4319 Series



Height: PA4322 (3.1mm Max), PA4318 (3.2mm Max), PA4319 (4.1mm Max)

Footprint: PA4322 (5.1x5.1mm Max), PA4318 (6.1x6.1mm Max), PA4319 (7.3x7.3mm Max)

Current Rating: up to 3.98A

Inductance Range: 2.2uH to 680uH

Electrical Specifications @ 25°C — Operating Temperature -40°C to 125°C

PART NUMBER	INDUCTANCE 100 KHz, 100 mV (uH±20%)	RATED CURRENT (A)	DCR (mOHMS MAX)	SATURATION CURRENT (TYPICAL) A			HEATING CURRENT	
				10% DROP	20% DROP	30% DROP	20°C Rise	40°C Rise
PA4322NL SERIES								
PA4322.222NLT	2.2	2.08	20	1.76	2.08	2.30	2.00	3.30
PA4322.472NLT	4.7	1.32	38	1.08	1.32	1.42	1.40	2.50
PA4322.103NLT	10	0.98	70	0.85	0.98	1.13	1.00	1.90
PA4322.223NLT	22	0.64	145	0.54	0.64	0.70	0.87	1.30
PA4322.473NLT	47	0.46	270	0.38	0.46	0.51	0.70	0.95
PA4322.683NLT	68	0.38	368	0.31	0.38	0.42	0.60	0.75
PA4322.104NLT	100	0.30	580	0.26	0.30	0.33	0.45	0.69
PA4322.224NLT	220	0.21	1100	0.18	0.21	0.23	0.39	0.40
PA4322.394NLT	390	0.15	1800	0.12	0.15	0.16	0.25	0.35
PA4318NL SERIES								
PA4318.472NLT	4.7	2.60	43	2.18	2.60	2.84	2.30	3.10
PA4318.682NLT	6.8	2.12	52	1.80	2.12	2.30	1.90	2.40
PA4318.103NLT	10	1.64	70	1.36	1.64	1.84	1.75	2.30
PA4318.153NLT	15	1.42	106	1.16	1.42	1.56	1.45	1.90
PA4318.223NLT	22	1.12	158	0.97	1.12	1.22	1.00	1.50
PA4318.473NLT	47	0.86	300	0.72	0.86	0.93	0.75	0.95
PA4318.683NLT	68	0.63	410	0.55	0.63	0.69	0.55	0.80
PA4318.104NLT	100	0.54	660	0.45	0.54	0.59	0.45	0.65

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PART NUMBER	INDUCTANCE ⁴ 100 KHz, 100 mV (uH±20%)	RATED CURRENT (A)	DCR (mOHMS MAX)	SATURATION CURRENT (TYPICAL) A			HEATING CURRENT	
				10% DROP	20% DROP	30% DROP	20°C Rise	40°C Rise
PA4319NL SERIES								
PA4319.332NLT	3.3*	3.28	18	2.74	3.28	3.72	3.95	5.00
PA4319.103NLT	10	1.92	38	1.64	1.92	2.10	2.55	3.20
PA4319.153NLT	15	1.60	55	1.36	1.60	1.78	1.90	2.60
PA4319.223NLT	22	1.26	82	1.02	1.26	1.42	1.35	2.00
PA4319.333NLT	33	1.04	124	0.91	1.04	1.16	1.05	1.50
PA4319.473NLT	47	0.92	155	0.74	0.92	1.00	1.00	1.35
PA4319.104NLT	100	0.64	310	0.54	0.64	0.71	0.70	0.90
PA4319.224NLT	220	0.41	710	0.35	0.41	0.47	0.40	0.55
PA4319.684NLT	680*	0.29	1980	0.22	0.27	0.29	0.25	0.32

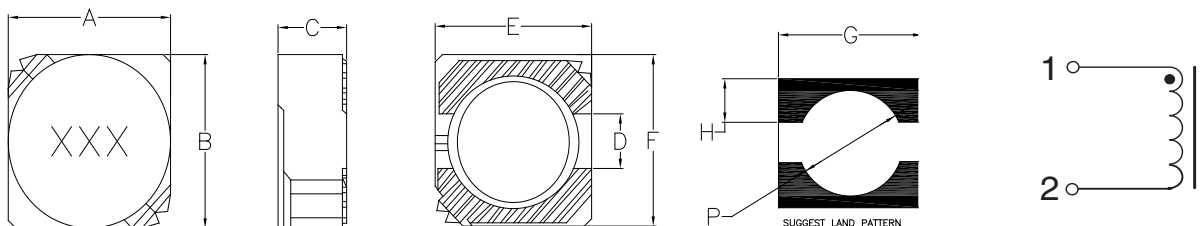
NOTES:

- 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 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 the value listed. Take note that the component's 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.
- Please note that the inductance tolerance is $\pm 20\%$ for all parts except PA4319.332NLT ($\pm 30\%$) and PA4319.684NLT ($\pm 10\%$).

Mechanical

Schematic

PA43XX.XXXNLT

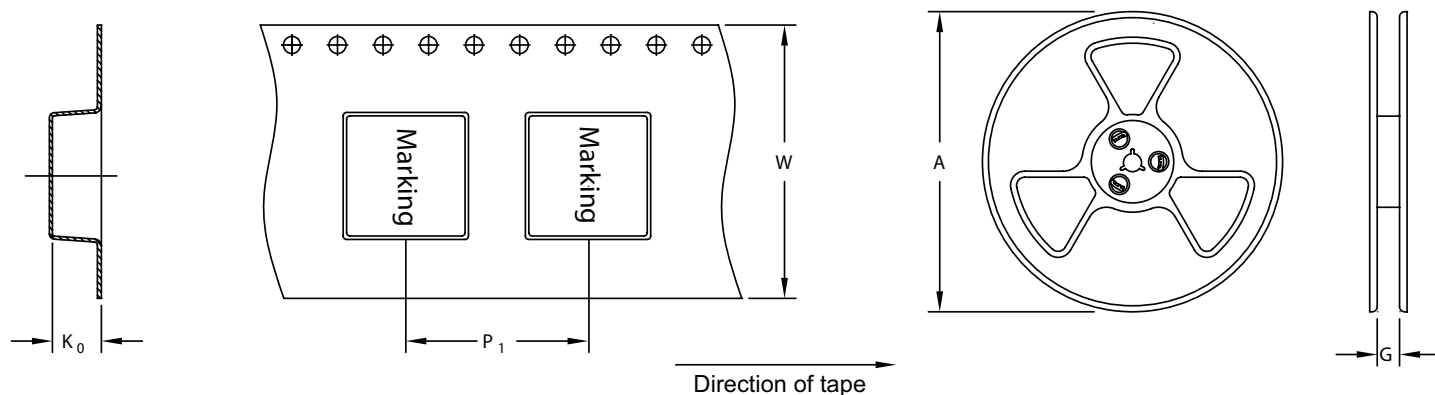


Part Number	A	B	C	D	E	F	G	H	J	P
PA4322.XXXNLT	5.1 MAX	5.1 MAX	3.1 MAX	1.6 TYP	4.6 TYP	4.6 TYP	5.08 TYP	1.74 TYP	5.08 TYP	4.05 TYP
PA4318.XXXNLT	6.1 MAX	6.1 MAX	3.2 MAX	2.0 TYP	5.6 TYP	5.6 TYP	6.0 MIN	2.0 TYP	6.0 MIN	4.85 TYP
PA4319.XXXNLT	7.3 MAX	7.3 MAX	4.1 MAX	2.1 TYP	6.6 TYP	6.6 TYP	7.1 TYP	2.5 TYP	7.1 TYP	5.65 TYP

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TAPE & REEL INFO

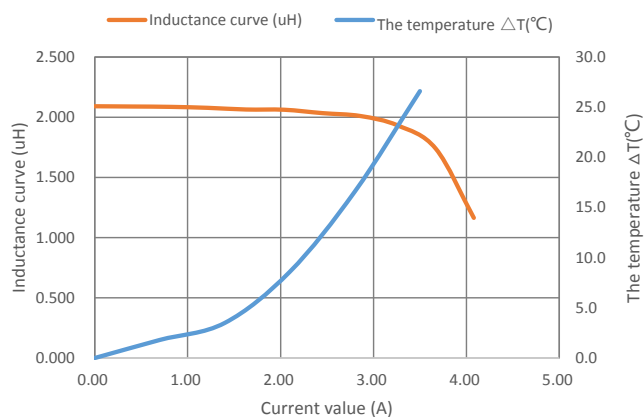


SURFACE MOUNTING TYPE, REEL/TAPE LIST

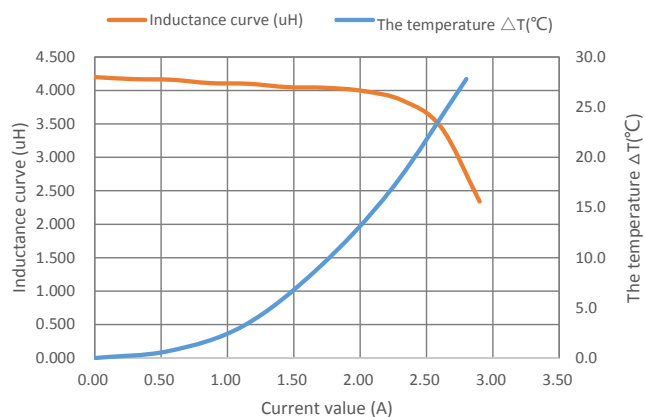
TYPE	REEL SIZE (mm)		TAPE SIZE (mm)			QTY PCS/REEL
	A	G	P ₁	W	K ₀	
PA4322.XXXNLT	Ø330	12.5	8	12	3.3	2000
PA4318.XXXNLT	Ø330	16.5	8	16	3.3	2000
PA4319.XXXNLT	Ø330	16.5	12	16	4.3	1000

Typical Performance Curves ---PA4322NLT SERIES

PA4322.222NLT



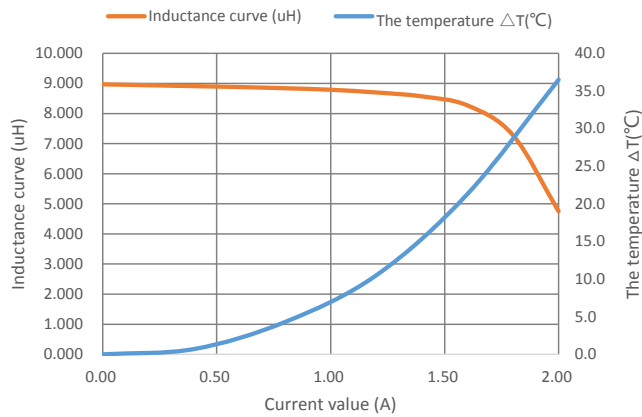
PA4322.472NLT



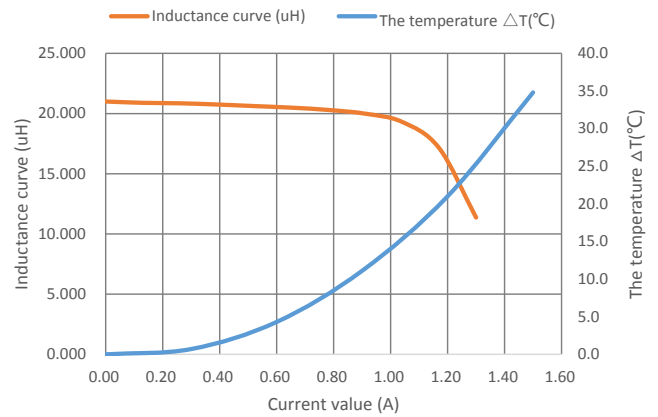
Shielded Drum Core Inductor

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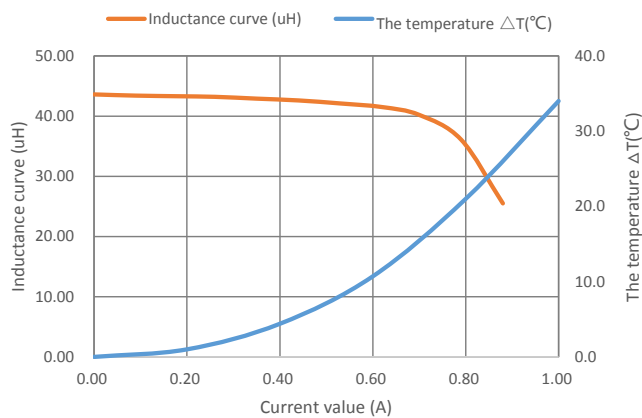
PA4322.103NLT



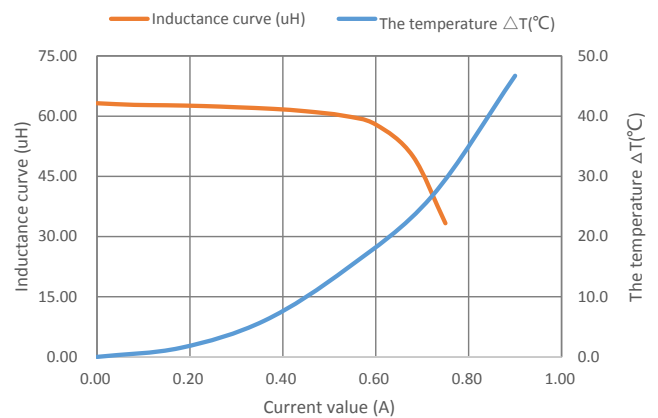
PA4322.223NLT



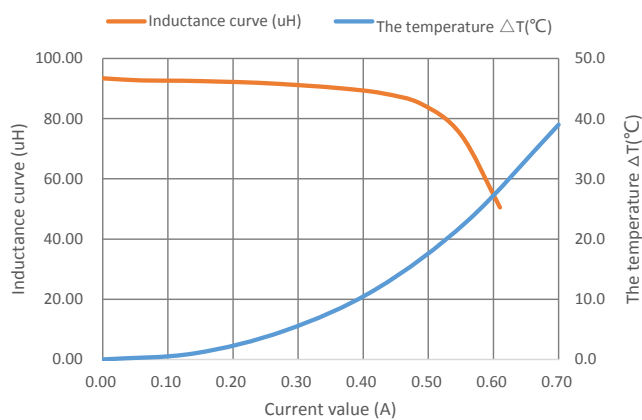
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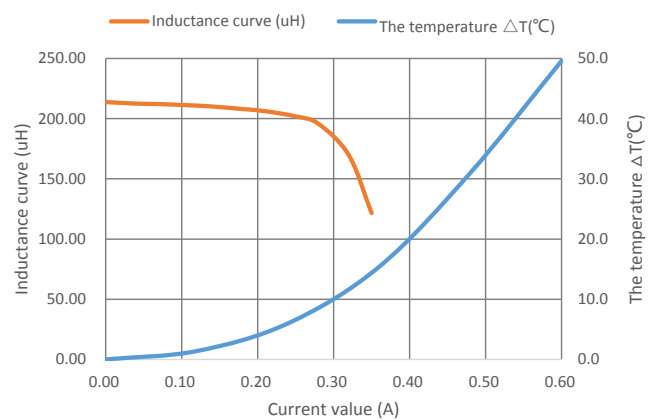
PA4322.683NLT



PA4322.104NLT



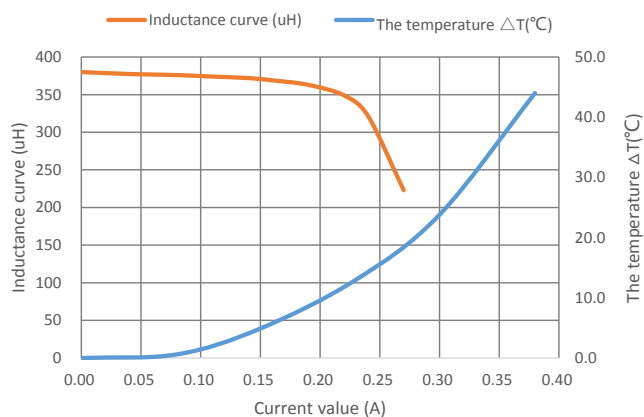
PA4322.224NLT



Shielded Drum Core Inductor

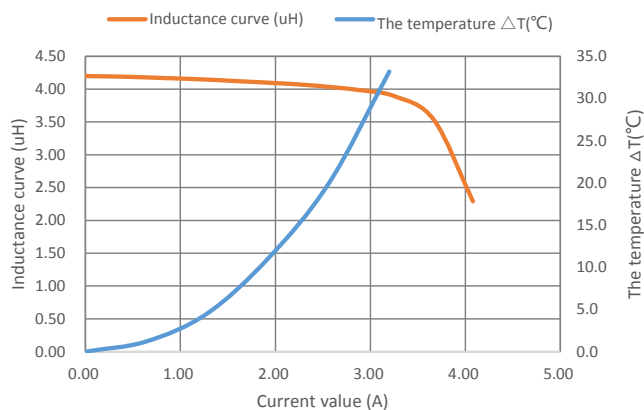
PA4322,PA4318,PA4319 Series

PA4322.394NLT

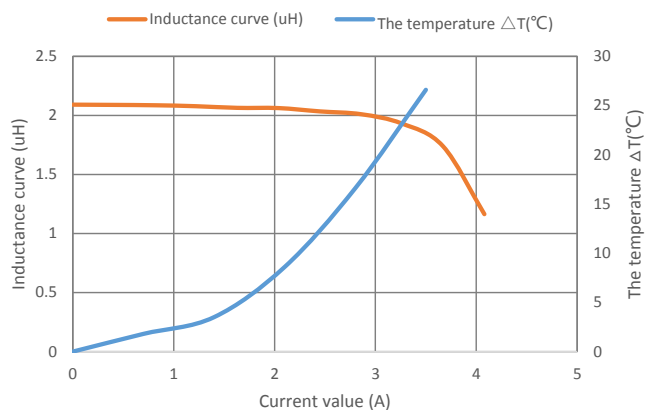


Typical Performance Curves ---PA4318NL SERIES

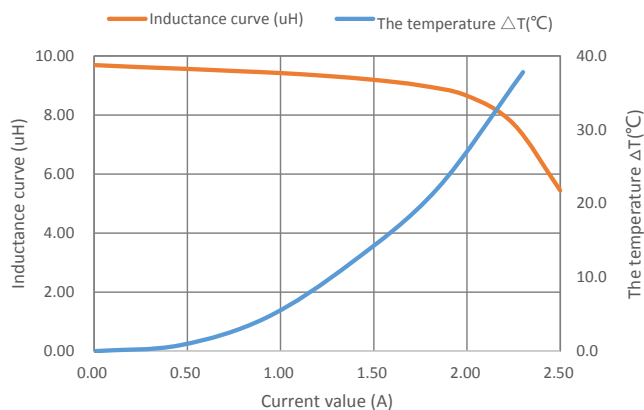
PA4318.472NLT



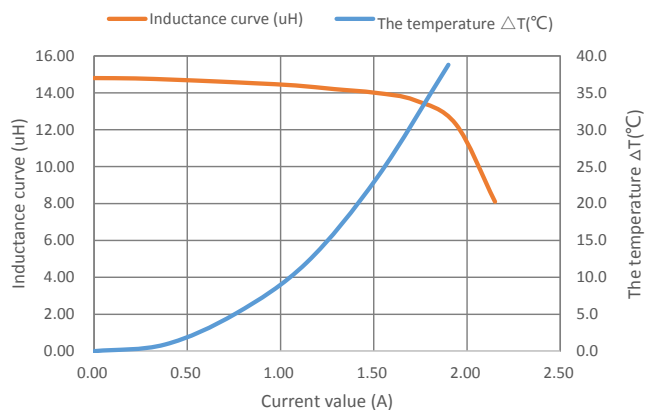
PA4318.682NLT



PA4318.103NLT



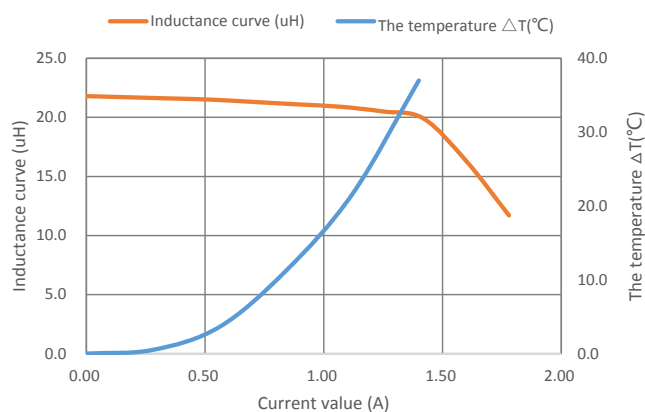
PA4318.153NLT



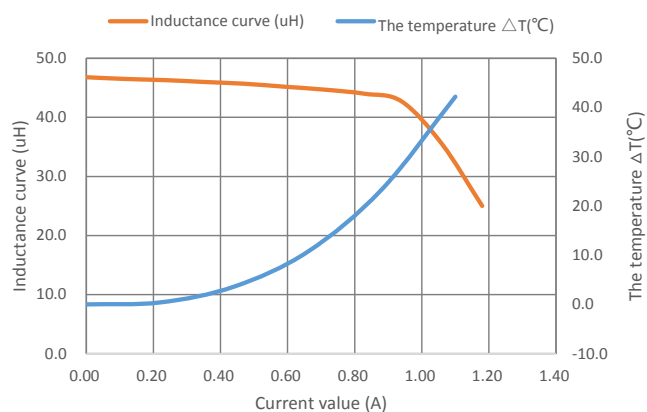
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PA4322,PA4318,PA4319 Series

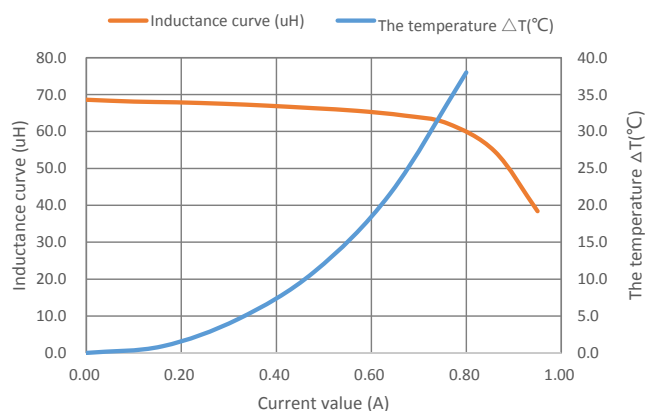
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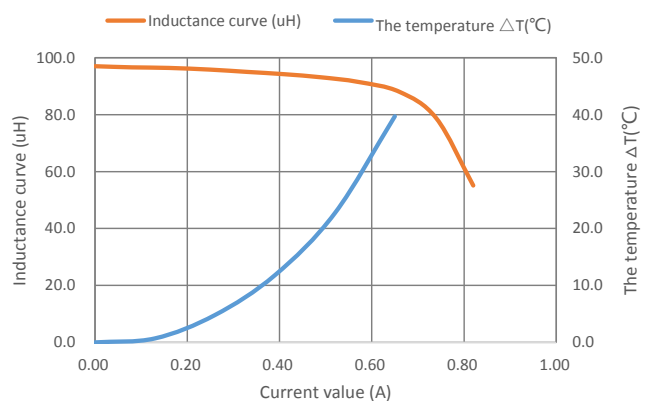
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PA4318.683NLT

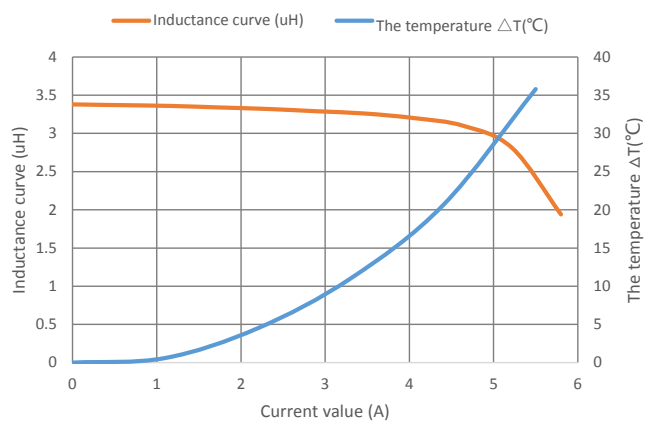


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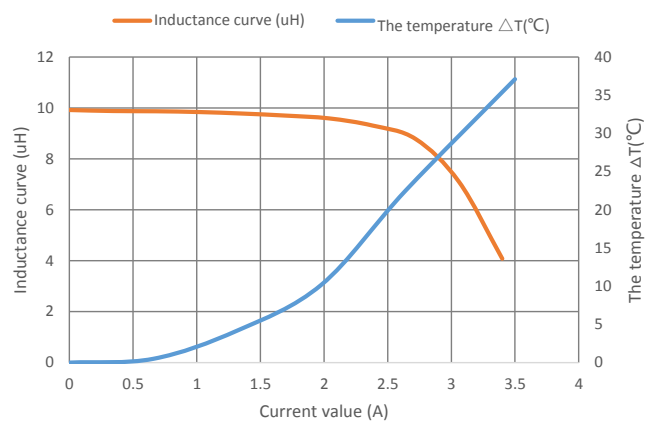


Typical Performance Curves ---PA4319NL SERIES

PA4319.332NLT



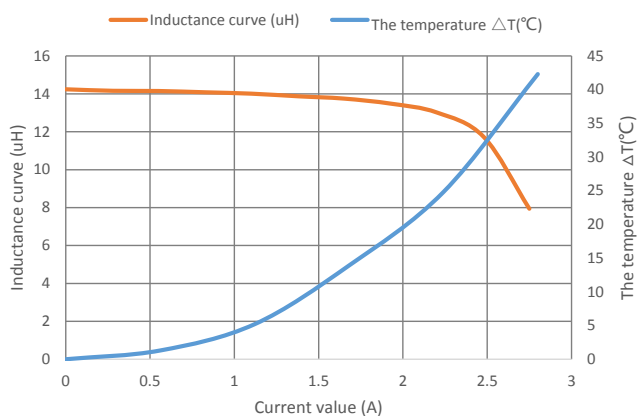
PA4319.103NLT



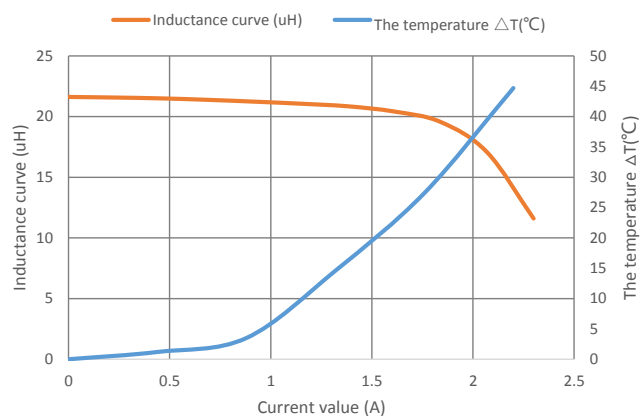
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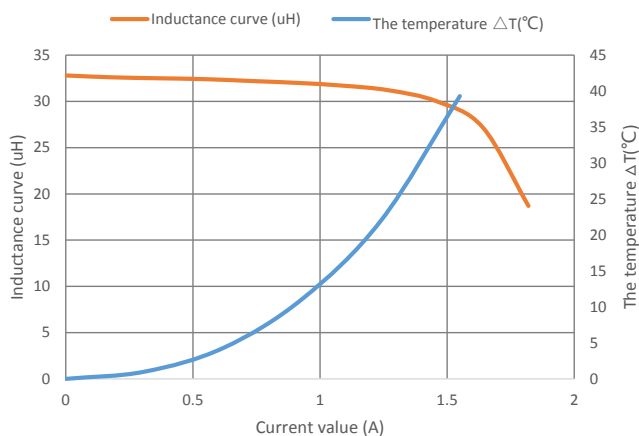
PA4319.153NLT



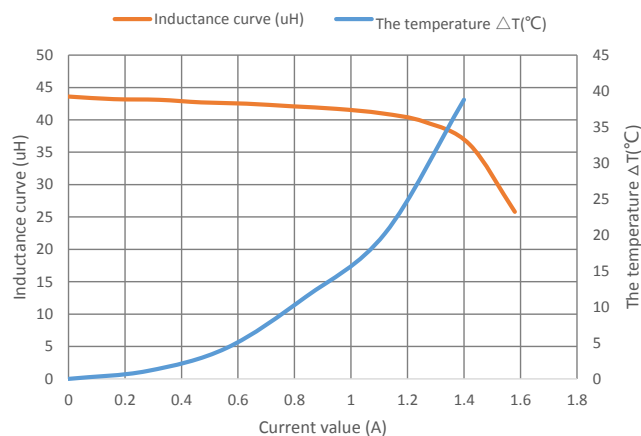
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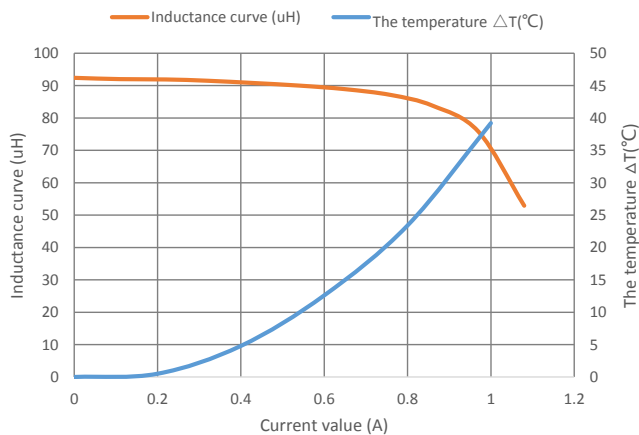
PA4319.333NLT



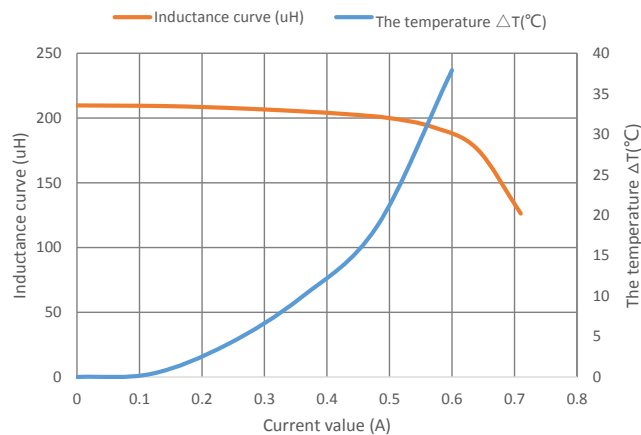
PA4319.473NLT



PA4319.104NLT

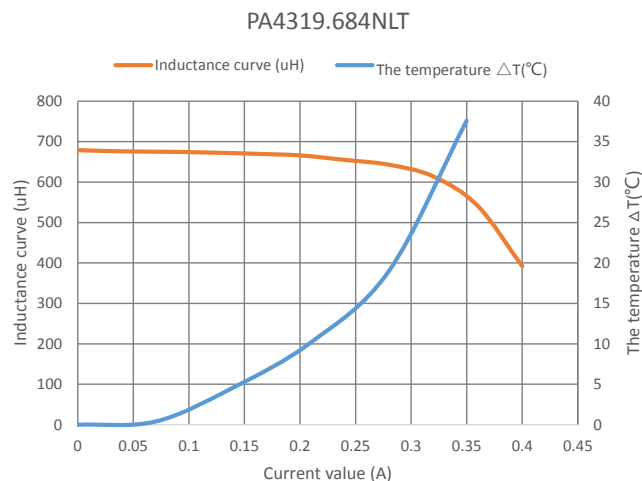


PA4319.224NLT



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<u>PA4318.683NLT</u>	<u>PA4319.332NLT</u>	<u>PA4319.153NLT</u>	<u>PA4319.103NLT</u>	<u>PA4322.394NLT</u>	<u>PA4319.223NLT</u>
<u>PA4322.472NLT</u>	<u>PA4322.683NLT</u>				