

FrelTec GmbH

Mathildenstr. 10A
82319 Starnberg
Germany

SMD Power Inductors Molding Inductor-General

SPECIFICATION

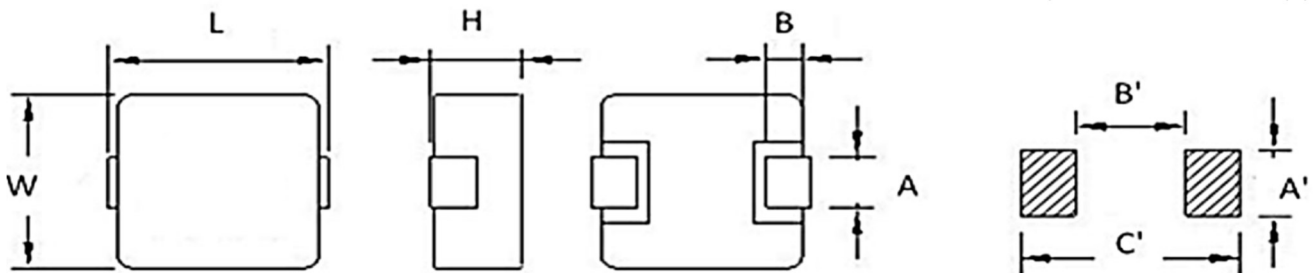
Part Number

150	3030*	101*	M	M	E02**	5
Type	Size	Value	Specification	Tolerance	Packing	Thick-ness
150 : SMD Power Inductor Molding Inductor-General	2222: 22,5x22,0 mm	The value is given in μH and "u" indicates the decimal point. When higher than $100\mu\text{H}$ then l the last digit is the multiplier which denotes the number of zero following	S: Standard Type	M: $\pm 20\%$ (standard)	L0Z : Embossed tape and reel for 3,5kpcs (13"reel)	1: 0,1 mm 2: 0,2 mm 3: 0,3 mm
	1413: 13,9x12,8 mm		H: High Current Type	Q: $\pm 25\%$	L03 : Embossed tape and reel for 3k pcs (13"reel)	4: 0,4 mm 5: 0,5 mm 6: 0,6 mm
1110: 11,2x10,0 mm	T: Specific Type		N: $\pm 30\%$	L02 : Embossed tape and reel for 2k pcs (13"reel)	7: 0,7 mm 8: 0,8 mm 9: 0,9 mm	
7266: 7,2x6,6mm	K: Low Profile with Special Reflow Specification		L0X : Embossed tape and reel for 1,5k pcs (13"reel)	A: 1,0 mm B: 1,1 mm C: 1,2 mm D: 1,4 mm		
7066: 7,0x6,6mm				L01 : Embossed tape and reel for 1,k pcs (13"reel)	E: 1,5 mm F: 1,6 mm G: 1,8 mm H: 2,0 mm	
5752: 5,7x5,2mm	L0Q : Embossed tape and reel for 800pcs (13"reel)		L0A : Embossed tape and reel for 500pcs (13"reel)	I: 2,4 mm J: 2,5 mm K: 2,8 mm L: 3,0 mm		
4742: 4,7x4,2mm				M: 3,5 mm N: 4,0 mm P: 4,5 mm		
4141: 4,1x4,1mm	3U3 : 3,3 μH			Q: 5,0 mm R: 6,0 mm S: 6,5 mm		
2520: 2,5x2,0mm	220 : 22 μH			T: 2,6 mm U: 7,0 mm V: 9,0 mm		
2016: 2,0x1,6mm	151 : 150 μH			W: 5,5 mm		
2012: 2,0x1,2mm		X: 13 mm Z: 3,2 mm				

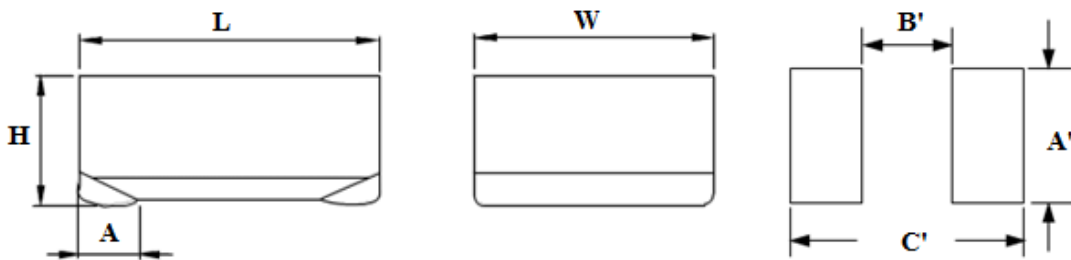
All products according to RoHS (2015/863/EU)

SMD

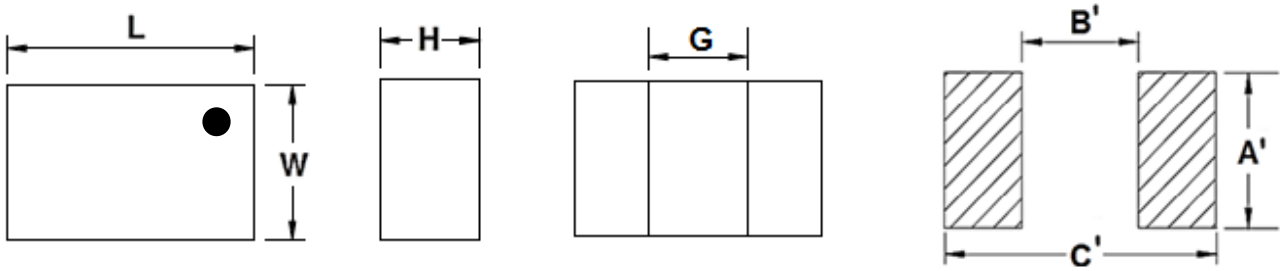
Dimensions and land pattern:



Series	Quantity per Reel (pcs)	L (mm)	W (mm)	H (mm)	A (mm)	B (mm)	Recommended Land Patterns			
							A' (mm)	B' (mm)	C' (mm)	
1504141	KML03A	3000	4,1±0,2	4,1±0,2	0,8±0,2	1,8±0,2	0,8±0,2	2,0	2,2	4,4
1504742	SML0AC	3500	4,7±0,3	4,2±0,2	1,0±0,2	2,0±0,3	0,8±0,3	2,5	2,4	5,4
1504742	SML0AE	3500	4,7±0,3	4,2±0,2	1,3±0,2	2,0±0,3	0,8±0,3	2,5	2,4	5,4
1504742	SML02H	2000	4,7±0,3	4,2±0,2	1,8±0,2	2,0±0,3	0,8±0,3	2,5	2,4	5,4
1505752	SML03E	3000	5,7±0,3	5,2±0,2	1,3±0,2	2,5±0,3	1,0±0,3	3,5	3,0	7,0
1505752	SML03H	3000	5,7±0,3	5,2±0,2	1,8±0,2	2,5±0,3	1,0±0,3	3,5	3,0	7,0
1505752	SML02L	2000	5,7±0,3	5,2±0,2	2,8±0,2	2,5±0,3	1,0±0,3	3,5	3,0	7,0
1507066	SML02E	2000	7,0±0,3	6,6±0,2	1,3±0,2	3,0±0,5	1,5±0,3	3,5	4,0	8,5
1507266	SML02G	2000	7,2±0,3	6,6±0,2	1,6±0,2	3,0±0,5	1,5±0,3	3,5	4,0	8,5
1507266	S L0XI	1500	7,2±0,3	6,6±0,2	2,2±0,2	3,0±0,5	1,5±0,3	3,5	4,0	8,5
1507266	S L0XL	1500	7,2±0,3	6,6±0,2	2,8±0,2	3,0±0,5	1,5±0,3	3,5	4,0	8,5
1507266	SML01N	1000	7,2±0,3	6,6±0,2	3,8±0,2	3,0±0,5	1,5±0,3	3,5	4,0	8,5
1507266	SML01Q	1000	7,2±0,3	6,6±0,2	4,8±0,2	3,0±0,5	1,5±0,3	3,5	4,0	8,5
1501110	SML0QN	800	11,2±0,3	10,0±0,2	3,8±0,2	3,0±0,5	2,0±0,5	4,0	5,5	13,5
1501110	TML0QN	800	11,2±0,3	10,0±0,2	3,8±0,2	3,0±0,5	2,0±0,5	4,0	5,5	13,5
1501413	SML0AQ	500	13,9±0,3	12,8±0,2	4,8±0,2	5,0±0,5	2,0±0,3	6,0	8,0	14,5
1501413	SML0AR	500	13,9±0,3	12,8±0,2	5,8±0,2	5,0±0,5	2,0±0,3	6,0	8,0	14,5
1501413	TML0AQ	500	13,9±0,3	12,8±0,2	4,8±0,2	5,0±0,5	2,0±0,3	6,0	8,0	14,5
1502222	SML0FX	50	22,5±0,5	22,0±0,5	13,0Max	18,5±0,5	5,0±0,5	18,8	11,5	23,3



Series	Quantity per Reel (pcs)	L (mm)	W (mm)	H (mm)	A (mm)	Recommended Land Patterns			
						A' (mm)	B' (mm)	C' (mm)	
1502520	H_E03A	3000	2,5±0,2	2,0±0,2	1,0Max	0,5±0,3	2,0	1,2	2,8
1502520	HME03C	3000	2,5±0,2	2,0±0,2	1,2Max	0,5±0,3	2,0	1,2	2,8
1502520	TME03A	3000	2,5±0,2	2,0±0,2	1,0Max	0,5±0,3	2,0	1,2	2,8
1502520	TME03C	3000	2,5±0,2	2,0±0,2	1,2Max	0,5±0,3	2,0	1,2	2,8
1502016	HME03A	3000	2,0±0,1	1,6±0,1	1,0Max	0,5±0,3	2,0	1,2	2,8
1502016	TME03A	3000	2,0±0,1	1,6±0,1	1,0Max	0,5±0,3	1,65	0,8	2,05



Series	Quantity per Reel (pcs)	L (mm)	W (mm)	H (mm)	G (mm)	Recommended Land Patterns		
						A' (mm)	B' (mm)	C' (mm)
1502012_KME038	3000	2,0±0,2	1,2±0,2	0,6Typ	0,8Max	1,3	0,5	2,1

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Part Numbers & Characteristic

Order code	Inductance L (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps. Idc(A)		Saturation Current DC Amps. Isat(A)		Marking
			Typ.	Max.	Typ.	(Max.)	Typ.	(Max.)	
1502012U47KME038	0,47	± 20%	26,0	33,0	3,90	3,70	4,80	4,30	—
15020121U0KME038	1,0	± 20%	45,0	55,0	3,50	3,20	3,80	3,30	—
15020122U2KME038	2,2	± 20%	90,0	110,0	1,80	1,60	2,10	1,90	—
1502016U47TME03A	0,47	± 20%	38,0	46,0	3,20	2,80	3,70	3,20	—
1502016U68TME03A	0,68	± 20%	54,0	65,0	2,70	2,35	2,70	2,35	—
15020161U0TME03A	1,0	± 20%	60,0	75,0	2,65	2,20	2,65	2,20	—
15020161U5TME03A	1,5	± 20%	115,0	130,0	1,75	1,65	1,90	1,60	—
15020162U2TME03A	2,2	± 20%	131,0	160,0	1,65	1,50	1,75	1,50	—
15020163U3TME03A	3,3	± 20%	210,0	255,0	1,30	1,20	1,30	1,15	—
15020164U7TME03A	4,7	± 20%	308,0	380,0	1,05	0,95	1,20	1,00	—
1502016U47HME03A	0,47	± 20%	30,0	36,0	3,6	3,3	4,9	4,1	—
1502016U68HME03A	0,68	± 20%	40,0	50,0	3,2	2,7	3,6	3,2	—
15020161U0HME03A	1,00	± 20%	58,3	70,0	2,7	2,3	3,1	2,6	—
15020161U5HME03A	1,50	± 20%	85,0	105,0	2,2	1,8	2,4	2,1	—
1502520U47TME03C	0,47	± 20%	30,0	39,0	3,90	3,40	4,80	4,20	---
15025201U0TME03C	1,0	± 20%	45,0	59,0	3,10	2,70	3,60	3,10	---
15025202U2TME03C	2,2	± 20%	90,0	117,0	2,20	1,90	2,40	2,00	---
15025203U3TME03C	3,3	± 20%	120,0	156,0	1,90	1,70	2,10	1,80	---
15025204U7TME03C	4,7	± 20%	200,0	260,0	1,50	1,30	1,70	1,50	---
15025201U0TME03A	1,0	± 20%	57	72,0	2,65	2,50	3,36	2,70	---
15025202U2TME03A	2,2	± 20%	124,0	156,0	1,70	1,50	2,20	1,90	---
15025204U7TME03A	4,7	± 20%	240,0	300,0	1,20	1,10	1,45	1,30	---
1502520U33HME03C	0,33	± 20%	19,2	23,0	4,4		6,6		—
1502520U47HME03C	0,47	± 20%	21,7	26,0	4,1		5,5		—
1502520U68HME03C	0,68	± 20%	30,0	36,0	3,5		5,1		—

Order code	Inductance L (µH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps. I _{dc} (A)		Saturation Current DC Amps. I _{sat} (A)		Marking
			Typ.	Max.	Typ.	(Max.)	Typ.	(Max.)	
15025201U0HME03C	1,0	± 20%	27,5	45,0	3,1		4,1		—
15025201U5HME03C	1,5	± 20%	54,2	65,0	2,6		3,2		—
15025202U2HME03C	2,2	± 20%	75,0	90,0	2,2		2,8		—
1502520U33HME03A	0,33	± 20%	21,7	26,0	4,3		6,0		---
1502520U47HME03A	0,47	± 20%	24,2	29,0	4,0		5,5		---
1502520U68HME03A	0,68	± 20%	35,8	43,0	3,4		4,3		---
15025201U0HME03A	1,0	± 20%	44,2	53,0	3,0		3,6		---
15025201U5HME03A	1,5	± 20%	65,0	78,0	2,3		2,8		---
15025202U2HME03A	2,2	± 20%	100,0	120,0	1,8		2,4		---
15041416U8KML03A	6,8	± 20%	210,0	255,0	1,75	1,60	2,10	1,70	—
150414110UKML03A	10,0	± 20%	280,0	336,0	1,75	1,50	1,85	1,65	—
1504742U33SML0ZC	0,33	± 20%	14,0	16,5	6,50		9,00		R33
1504742U47SML0ZC	0,47	± 20%	19,0	21,0	6,00		6,80		R47
1504742U68SML0ZC	0,68	± 20%	32,0	36,0	4,50		6,00		R68
15047421U0SML0ZC	1,0	± 20%	43,0	47,0	4,20		5,20		1R0
15047421U5SML0ZC	1,5	± 20%	68,0	75,0	3,25		4,00		1R5
15047422U2SML0ZC	2,2	± 20%	79,4	83,5	2,75		3,50		2R2
15047423U3SML0ZC	3,3	± 20%	120,0	138,0	2,30		3,00		3R3
15047424U7SML0ZC	4,7	± 20%	175,0	195,0	1,80		2,80		4R7
15047421U0SML0ZE	1,0	± 20%	31,0	38,0	6,00		8,90		1R0
1504742U22SML02H	0,22	± 20%	6,0	6,6	9,0		12,5		R22
1504742U47SML02H	0,47	± 20%	12,5	14,0	7,0		9,5		R47
1504742U68SML02H	0,68	± 20%	19,4	21,0	5,2		8,0		R68
15047421U0SML02H	1,0	± 20%	24,0	27,0	4,5		7,0		1R0
15047421U5SML02H	1,5	± 20%	38,0	46,0	4,0		6,0		1R5
15047422U2SML02H	2,2	± 20%	52,0	58,0	3,0		5,0		2R2

Order code	Inductance L (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps. I _{dc} (A)		Saturation Current DC Amps. I _{sat} (A)		Marking
			Typ.	Max.	Typ.	(Max.)	Typ.	(Max.)	
15047423U3SML02H	3,3	± 20%	74,0	87,0	2,5		4,0		3R3
15047424U7SML02H	4,7	± 20%	92,0	105,0	2,2		3,0		4R7
15047426U8SML02H	6,8	± 20%	162,0	178,0	2,0		2,1		6R8
150474210USML02H	10,0	± 20%	256,0	282,0	1,6		1,8		100
1505752U22SNL03E	0,22	± 30%	5,8	7,0	10,0		17,0		R22
15057521U0SML03E	1,0	± 20%	20,0	23,0	6,5		9,0		1R0
15057521U5SML03E	1,5	± 20%	46,0	53,0	4,2		7,0		1R5
15057522U2SML03E	2,2	± 20%	58,0	64,0	3,3		6,0		2R2
15057523U3SML03E	3,3	± 20%	70,0	80,0	3,2		4,5		3R3
15057524U7SML03E	4,7	± 20%	103,0	115,0	3,0		4,0		4R7
15057526U8SML03E	6,8	± 20%	167,0	180,0	2,5		3,2		6R8
150575210USML03E	10,0	± 20%	220,0	246,0	2,0		3,0		100
1505752U22SML03H	0,22	± 20%	4,1	4,5	12,0		20,0		R22
1505752U24SML03H	0,24	± 20%	5,0	5,8	11,7		18,5		R24
1505752U33SML03H	0,33	± 20%	5,5	5,9	11,5		16,0		R33
1505752U47SML03H	0,47	± 20%	8,0	10,0	10,5		15,5		R47
1505752U56SML03H	0,56	± 20%	8,2	10,0	10,0		13,0		R56
1505752U68SML03H	0,68	± 20%	10,5	13,0	9,5		12,0		R68
15057521U0SML03H	1,0	± 20%	15,0	17,0	8,0		9,5		1R0
15057521U2SML03H	1,2	± 20%	19,5	22,5	7,0		9,0		1R2
15057521U5SML03H	1,5	± 20%	24,2	27,5	6,0		8,5		1R5
15057522U2SML03H	2,2	± 20%	30,0	35,0	5,0		6,5		2R2
15057523U3SML03H	3,3	± 20%	49,0	55,0	4,5		5,5		3R3
15057524U7SML03H	4,7	± 20%	75,3	81,3	3,5		4,5		4R7
15057525U6SML03H	5,6	± 20%	85,2	92,0	3,0		4,0		5R6
15057526U8SML03H	6,8	± 20%	107,0	120,0	2,8		3,6		6R8
150575210USML03H	10,0	± 20%	140,0	155,0	2,4		3,4		100

Order code	Inductance L (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps. Idc(A)		Saturation Current DC Amps. Isat(A)		Marking
			Typ.	Max.	Typ.	(Max.)	Typ.	(Max.)	
1505752U47SML02L	0,47	± 20%	6,5	8,0	13,0		16,0		R47
15057521U0SML02L	1,0	± 20%	13,0	14,0	7,0		11,0		1R0
15057521U5SML02L	1,5	± 20%	18,0	25,0	6,2		9,5		1R5
15057522U2SML02L	2,2	± 20%	29,0	35,0	5,5		9,0		2R2
15057523U3SML02L	3,3	± 20%	32,0	38,0	5,0		7,0		3R3
15057524U7SML02L	4,7	± 20%	50,0	60,0	4,4		6,0		4R7
15057526U8SML02L	6,8	± 20%	75,0	88,5	3,4		3,8		6R8
150575210USML02L	10,0	± 20%	95,0	114,0	2,5		3,5		100
150575222USML02L	22,0	± 20%	230,0	275,0	2,3		2,1		220
1507066U22SML02E	0,22	± 20%	5,1	5,8	11,0		22,0		R22
1507066U33SML02E	0,33	± 20%	6,8	7,8	10,0		19,5		R33
1507066U47SML02E	0,47	± 20%	8,5	9,8	9,5		16,0		R47
1507066U56SML02E	0,56	± 20%	9,5	11,0	9,0		14,0		R56
1507066U68SML02E	0,68	± 20%	12,5	14,5	8,0		12,0		R68
1507066U82SML02E	0,82	± 20%	15,0	17,0	7,0		10,0		R82
15070661U0SML02E	1,0	± 20%	18,5	21,0	5,5		9,0		1R0
15070661U2SML02E	1,2	± 20%	21,0	30,0	5,4		8,5		1R2
15070661U5SML02E	1,5	± 20%	37,0	42,5	5,0		7,0		1R5
15070662U2SML02E	2,2	± 20%	41,0	50,0	4,9		6,1		2R2
15070663U3SML02E	3,3	± 20%	54,0	63,0	3,3		5,5		3R3
15070664U7SML02E	4,7	± 20%	76,0	85,0	3,0		5,0		4R7
15070666U8SML02E	6,8	± 20%	125,0	135,0	2,5		4,0		6R8
150706610USML02E	10,0	± 20%	165,0	175,0	2,0		3,0		100
1507266U10SML02G	0,10	± 20%	1,9	2,3	18,0		30,0		R10
1507266U22SML02G	0,22	± 20%	4,5	5,2	14,0		29,0		R22
1507266U33SML02G	0,33	± 20%	5,2	6,8	12,0		22,0		R33
1507266U47SML02G	0,47	± 20%	7,3	8,4	11,0		17,0		R47

Order code	Inductance L (uH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps. Idc(A)		Saturation Current DC Amps. Isat(A)		Marking
			Typ.	Max.	Typ.	(Max.)	Typ.	(Max.)	
1507266U68SML02G	0,68	± 20%	10,8	12,7	9,0		16,0		R68
1507266U82SML02G	0,82	± 20%	13,4	15,9	8,0		14,0		R82
15072661U0SML02G	1,0	± 20%	14,5	17,0	7,0		12,0		1R0
15072661U5SML02G	1,5	± 20%	20,0	26,0	6,0		10,0		1R5
15072662U2SML02G	2,2	± 20%	31,0	35,0	5,0		8,0		2R2
15072663U3SML02G	3,3	± 20%	56,0	60,0	3,5		7,0		3R3
15072664U7SML02G	4,7	± 20%	60,0	75,0	3,5		5,5		4R7
15072666U8SML02G	6,8	± 20%	101,0	110,0	2,8		4,5		6R8
15072668U2SML02G	8,2	± 20%	124,0	142,0	2,5		4,0		8R2
150726610USML02G	10,0	± 20%	155,0	166,0	2,0		3,0		100
1507266U22SML0XI	0,22	± 20%	2,5	3,0	21,0		34,0		R22
15072663U3SML0XI	3,3	± 20%	31,0	39,0	5,5		8,0		3R3
15072666U8SML0XI	6,8	± 20%	57,0	70,0	4,0		6,0		6R8
150726610USML0XI	10,0	± 20%	92,0	101,0	3,1		4,0		100
1507266U10SNL0XL	0,10	± 30%	1,5	1,7	32,5		60,0		R10
1507266U15SNL0XL	0,15	± 30%	1,5	1,8	24,0		41,0		R15
1507266U22SML0XL	0,22	± 20%	2,5	2,8	23,0		34,0		R22
1507266U33SML0XL	0,33	± 20%	3,0	3,5	21,0		25,0		R33
1507266U47SML0XL	0,47	± 20%	3,5	4,1	18,0		20,0		R47
1507266U56SML0XL	0,56	± 20%	3,9	4,5	16,5		18,0		R56
1507266U68SML0XL	0,68	± 20%	4,5	5,0	16,0		17,0		R68
1507266U82SML0XL	0,82	± 20%	7,0	7,5	14,0		16,0		R82
15072661U0SML0XL	1,0	± 20%	8,5	9,0	12,0		15,0		1R0
15072661U5SML0XL	1,5	± 20%	10,6	12,1	10,0		13,0		1R5
15072662U2SML0XL	2,2	± 20%	15,5	18,0	8,0		10,0		2R2
15072662U5SML0XL	2,5	± 20%	18,0	20,0	7,0		10,0		2R5
15072663U3SML0XL	3,3	± 20%	25,0	28,0	6,5		9,0		3R3

Order code	Inductance L (µH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps. I _{dc} (A)		Saturation Current DC Amps. I _{sat} (A)		Marking
			Typ.	Max.	Typ.	(Max.)	Typ.	(Max.)	
15072664U7SML0XL	4,7	± 20%	32,5	35,0	5,5		6,5		4R7
15072665U6SML0XL	5,6	± 20%	36,0	42,0	5,0		6,3		5R6
15072666U8SML0XL	6,8	± 20%	43,9	50,0	4,5		6,0		6R8
15072668U2SML0XL	8,2	± 20%	54,0	60,0	4,5		6,0		8R2
150726610USML0XL	10	± 20%	62,0	68,0	4,0		5,5		100
150726615USML0XL	15	± 20%	105,0	125,0	3,0		4,0		150
150726622USML0XL	22	± 20%	144,0	160,0	2,5		3,0		220
15072666U8SML01N	6,8	± 20%	38,0	46,0	4,7		7,5		6R8
150726633USML01N	33	± 20%	190,0	228,0	2,5		3,0		330
1507266U36SML01Q	0,36	± 20%	2,7	3,1	21,0		25,0		R36
1507266U56SML01Q	0,56	± 20%	3,4	3,6	20,0		18,0		R56
1507266U68SML01Q	0,68	± 20%	3,3	3,6	18,0		17,0		R68
1507266U82SML01Q	0,82	± 20%	4,6	4,9	16,5		17,0		R82
15072661U0SML01Q	1,0	± 20%	4,5	5,3	14,5		16,0		1R0
15072661U5SML01Q	1,5	± 20%	6,0	7,5	11,5		15,0		1R5
15072662U2SML01Q	2,2	± 20%	9,0	10,5	10,5		13,5		2R2
15072663U3SML01Q	3,3	± 20%	14,0	15,0	9,0		10,0		3R3
15072664U7SML01Q	4,7	± 20%	23,0	25,0	6,5		8,0		4R7
15072665U6SML01Q	5,6	± 20%	31,5	34,4	6,0		7,0		5R6
15072666U8SML01Q	6,8	± 20%	31,5	35,5	5,5		6,5		6R8
15072668U2SML01Q	8,2	± 20%	40,0	43,0	5,0		5,5		8R2
150726610USML01Q	10,0	± 20%	42,0	50,0	4,5		5,0		100
150726615USML01Q	15,0	± 20%	76,0	85,0	3,8		4,6		150
150726622USML01Q	22,0	± 20%	105,0	120,0	3,0		3,7		220
150726633USML01Q	33,0	± 20%	155,0	170,0	2,6		3,1		330
150726656USML01Q	56,0	± 20%	235,0	290,0	1,8		2,2		560
15011102U2SML0QN	2,2	± 20%	6	7	12,0		18,0		DN2R2

Order code	Inductance L (µH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps. I _{dc} (A)		Saturation Current DC Amps. I _{sat} (A)		Marking
			Typ.	Max.	Typ.	(Max.)	Typ.	(Max.)	
15011103U3SML0QN	3,3	± 20%	10,8	11,8	10,0		16,0		DN3R3
15011104U7SML0QN	4,7	± 20%	17	20	8,5		15,0		DN4R7
15011105U6SML0QN	5,6	± 20%	20	23	8,0		14,0		DN5R6
15011106U8SML0QN	6,8	± 20%	22,5	25	7,0		12,0		DN6R8
15011108U2SML0QN	8,2	± 20%	25	27	6,5		9,0		DN8R2
1501110100SML0QN	10,0	± 20%	27	30	6,5		8,5		DN100
1501110150SML0QN	15,0	± 20%	40	45	6,3		7,0		DN150
1501110220SML0QN	22,0	± 20%	60	66	5,0		5,5		DN220
1501110330SML0QN	33,0	± 20%	85	92	4,0		4,5		DN330
1501110470SML0QN	47,0	± 20%	130	145	3,3		3,5		DN470
1501110680SML0QN	68,0	± 20%	178,0	195,0	2,3		3,0		DN680
1501110U47TML0QN	0,47	± 20%	2,5	3	21,0		35,0		R47
1501110U68TML0QN	0,68	± 20%	3	3,3	18,0		29,0		R68
15011101U0TML0QN	1,0	± 20%	3,3	3,6	17,0		28,0		1R0
15011101U2TML0QN	1,2	± 20%	4,5	5,4	16,0		22,0		1R2
15011101U5TML0QN	1,5	± 20%	4,7	5,6	15,0		21,0		1R5
15014132U2SML0AQ	2,2	± 20%	4,0	5,0	15,0		24,0		DN2R2
15014133U3SML0AQ	3,3	± 20%	5,9	7,0	14,0		22,0		DN3R3
15014134U7SML0AQ	4,7	± 20%	8,5	10,5	13,0		19,0		DN4R7
15014136U8SML0AQ	6,8	± 20%	13,0	15,5	12,0		14,0		DN6R8
1501413100SML0AQ	10,0	± 20%	19,0	22,0	9,0		12,0		DN100
1501413150SML0AQ	15,0	± 20%	26,0	31,0	5,9		8,4		DN150
1501413220SML0AQ	22,0	± 20%	51,0	58,0	4,5		6,5		DN220
1501413270SML0AQ	27,0	± 20%	58,0	66,0	4,0		6,3		DN270
1501413330SML0AQ	33,0	± 20%	75,0	84,0	3,5		6,0		DN330
1501413470SML0AQ	47,0	± 20%	116,0	130,0	3,0		5,0		DN470

Order code	Inductance L (µH)	Tolerance	DC Resistance (mΩ)		Heat Rating Current DC Amps. Idc(A)		Saturation Current DC Amps. Isat(A)		Marking
			Typ.	Max.	Typ.	(Max.)	Typ.	(Max.)	
15014132U2SML0AR	2,2	± 20%	3,8	4,1	21,0		25,0		DN2R2
15014133U3SML0AR	3,3	± 20%	5,3	6,4	17,0		22,0		DN3R3
15014134U7SML0AR	4,7	± 20%	7,2	9,0	16,0		18,0		DN4R7
15014136U8SML0AR	6,8	± 20%	9,5	12,0	12,0		15,0		DN6R8
15014138U2SML0AR	8,2	± 20%	13,6	16,0	11,0		13,5		DN8R2
1501413100SML0AR	10,0	± 20%	18,0	20,7	10,0		12,5		DN100
1501413120SML0AR	12,0	± 20%	20,0	23,0	7,0		10,0		DN120
1501413150SML0AR	15,0	± 20%	25,0	29,0	6,0		9,0		DN150
1501413220SML0AR	22,0	± 20%	34,0	39,5	5,0		7,5		DN220
1501413270SML0AR	27,0	± 20%	49,0	56,0	4,5		6,5		DN270
1501413330SML0AR	33,0	± 20%	65,0	75,0	4,0		6,0		DN330
1501413470SML0AR	47,0	± 20%	80,0	90,0	3,5		5,5		DN470
1501413680SML0AR	68,0	± 20%	120,0	140,0	3,0		4,5		DN680
1501413101SML0AR	100,0	± 20%	180,0	200,0	2,5		3,5		DN101
1501413121SML0AR	120,0	± 20%	210,0	235,0	2,3		3,2		DN121
1501413151SML0AR	150,0	± 20%	250,0	300,0	2,2		2,7		DN151
1501413U68TML0AQ	0,68	± 20%	2,5	3,0	23,0		38,0		R68
15014131U0TML0AQ	1,0	± 20%	3,0	3,6	22,0		28,0		1R0
15014131U5TML0AQ	1,5	± 20%	3,5	4,2	18,5		23,0		1R5
15022224U7SML0FX	4,7	± 20%	1,9	2,2	41,0	40,0	60,0	45,0	4R7
15022226U8SML0FX	6,8	± 20%	2,7	3,2	29,0	28,0	58,0	48,0	6R8

Test Frequency: 100 KHz (2012, 2016 size 1MHz) 1,0V

All test data is referenced to 25°C ambient.

Operating Temperature Range -40°C to + 125°C and -55°C to +125°C for K-Material

The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace and thickness, airflow and other cooling provision all the part temperature. Part temperature should be verified in the end application.

Idc (Irms): DC current (A) that will cause an approximate ΔT of 40°C.

Isat: DC current (A) that will cause L to drop approximately 30%.

Test Instrument: Inductance (CH-3302+CH-1320); Rdc (CH 16502)

Caution Temperature Rise

Temperature rise of this inductor depends on the installed board condition.

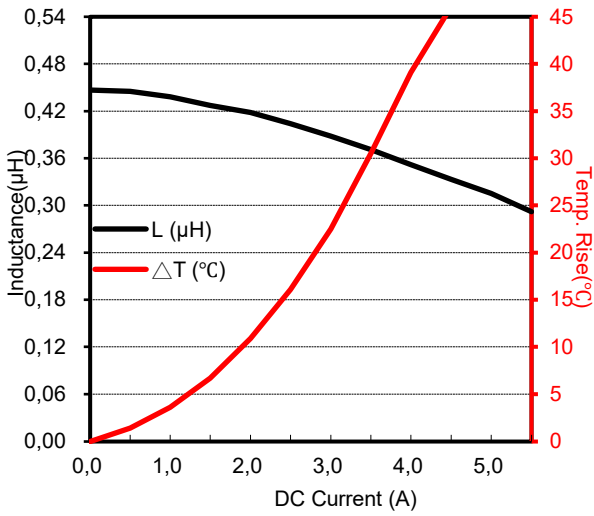
It shall be confirmed in the actual end product that temperature rise of inductor is within operation temperature.

FrelTec

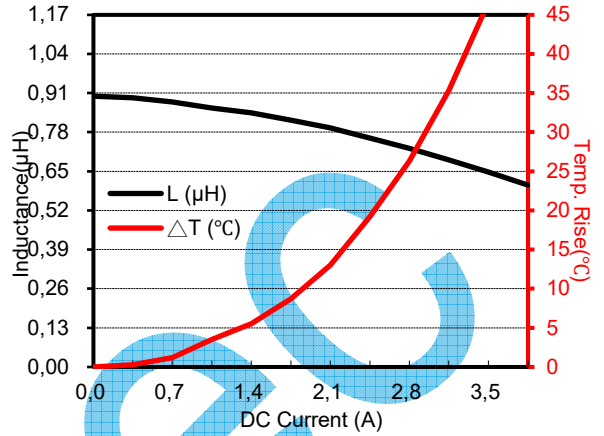
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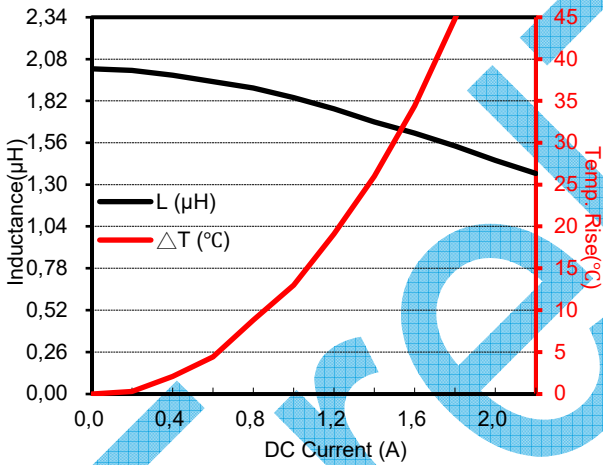
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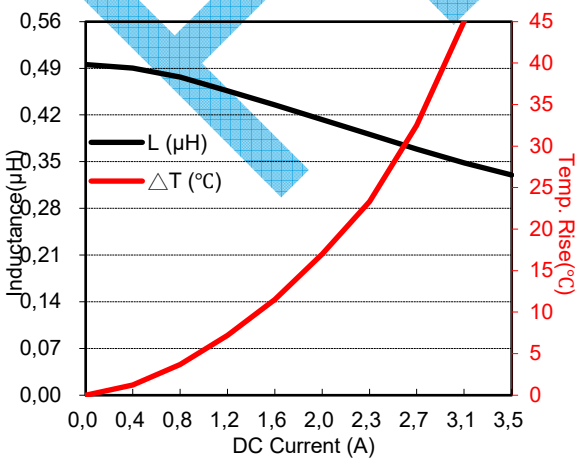
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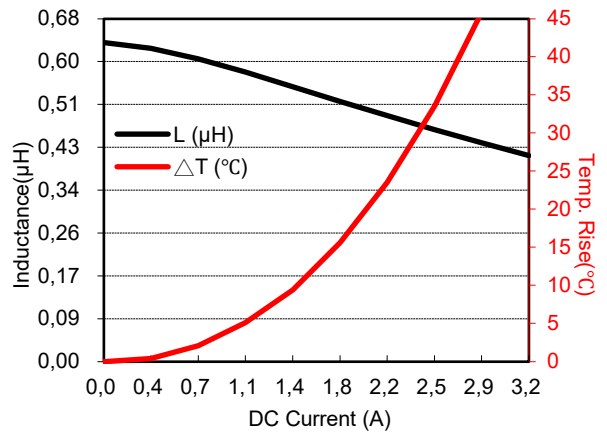
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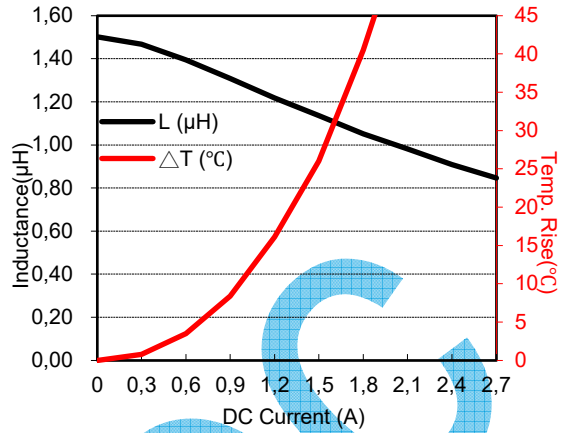
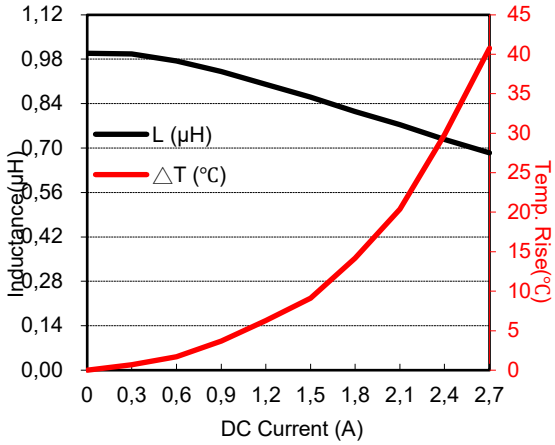


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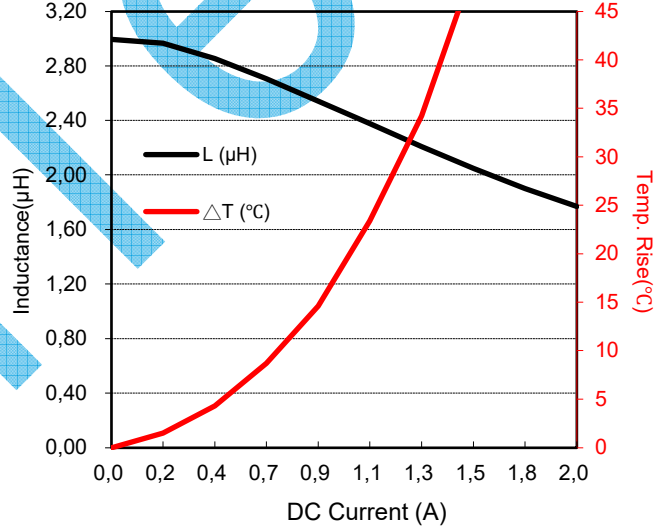
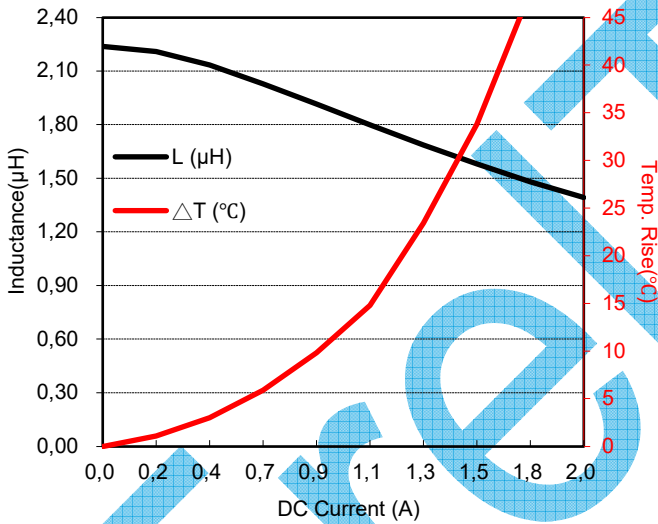
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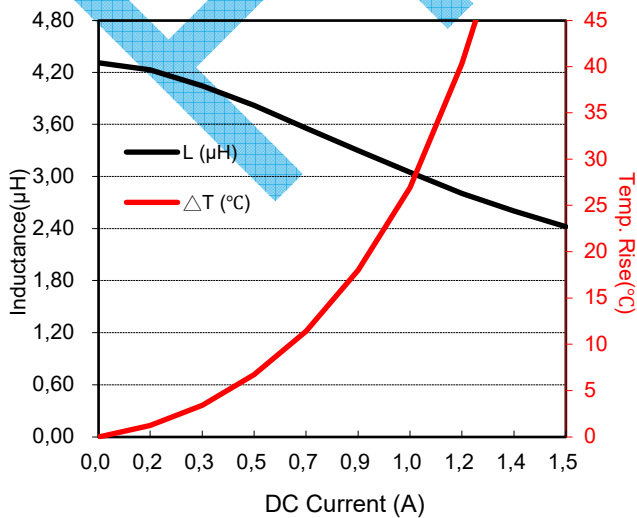


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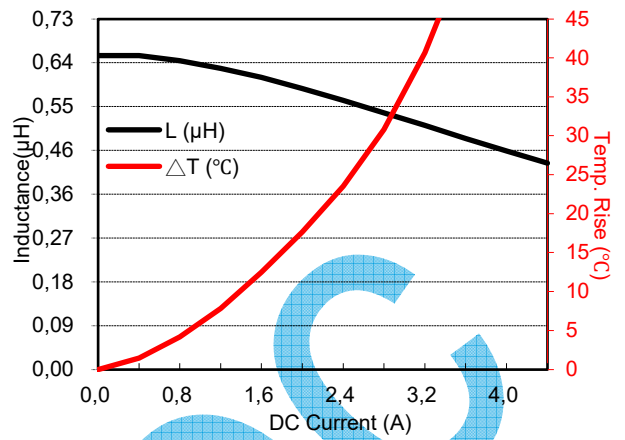
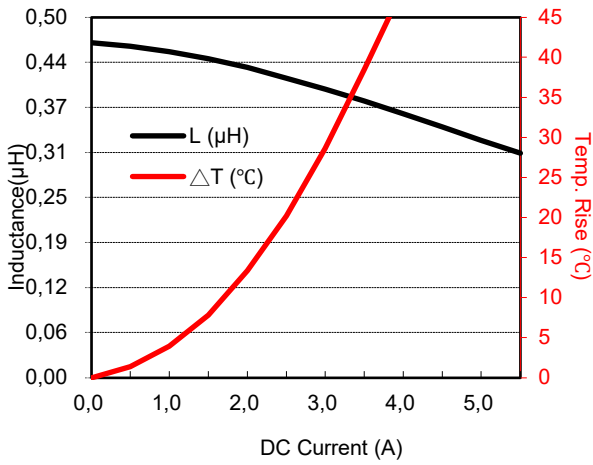


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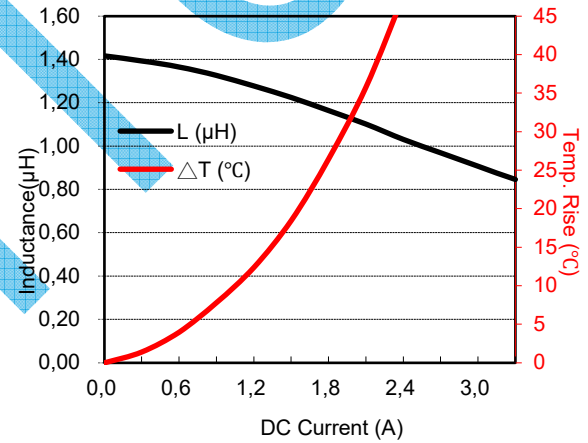
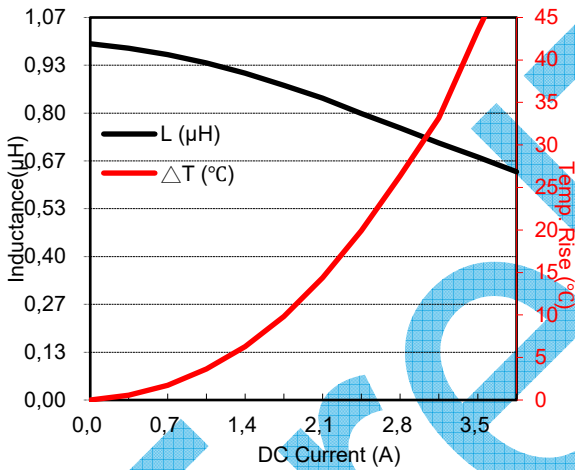
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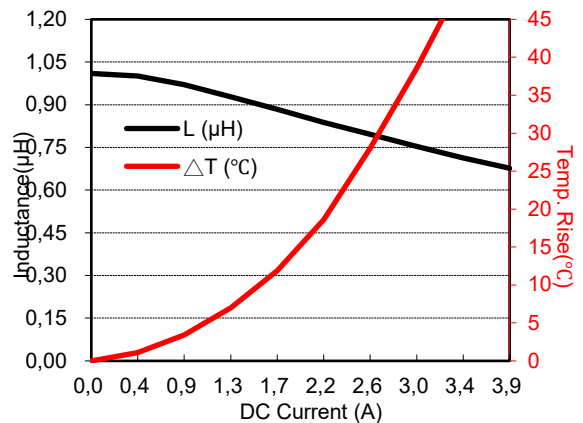
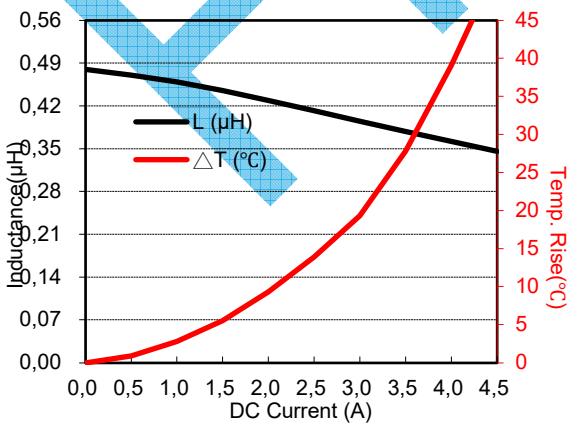
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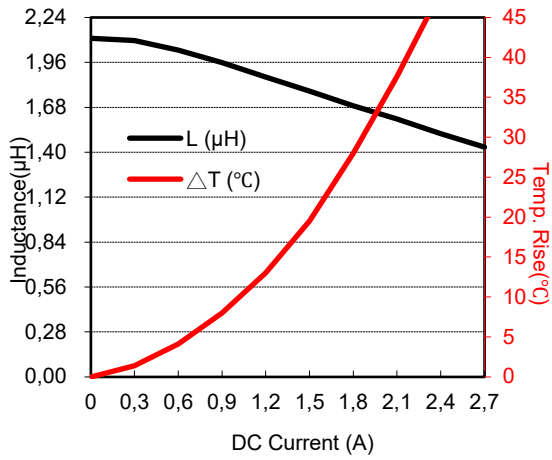
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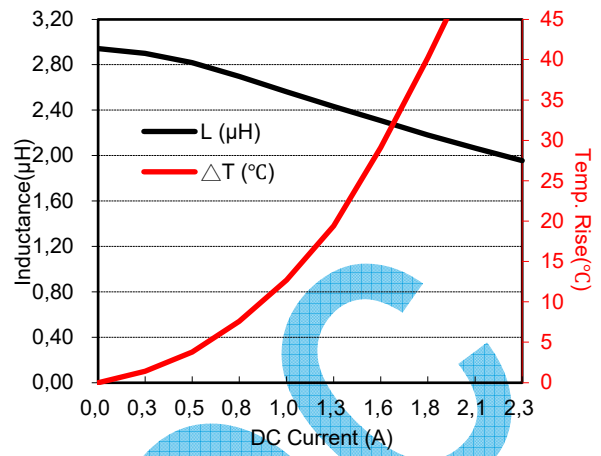
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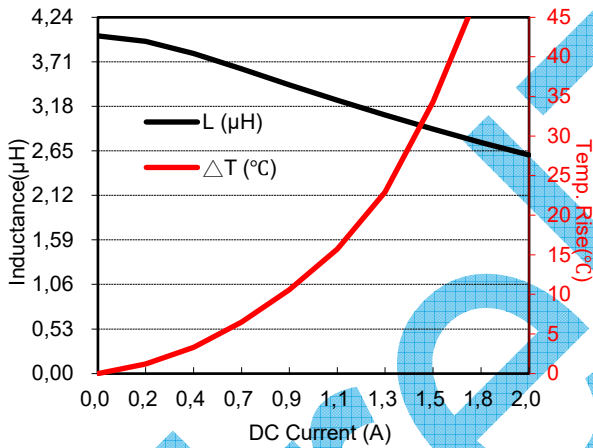


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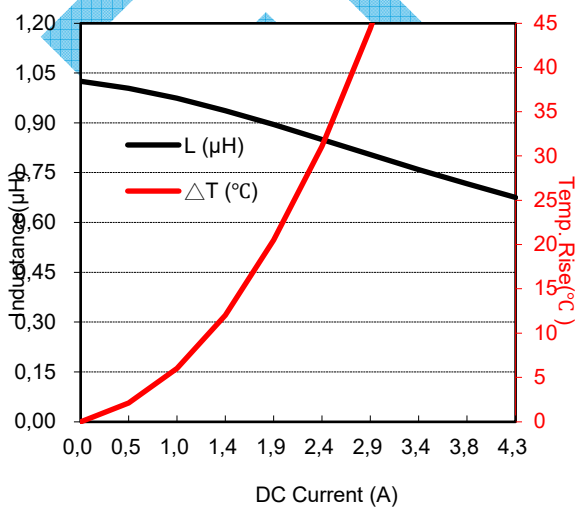
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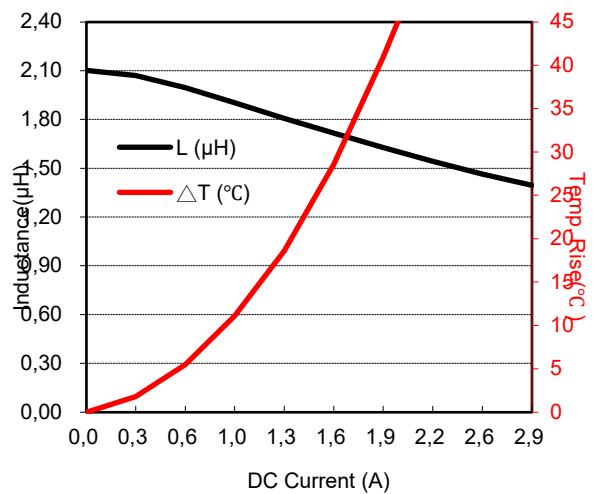
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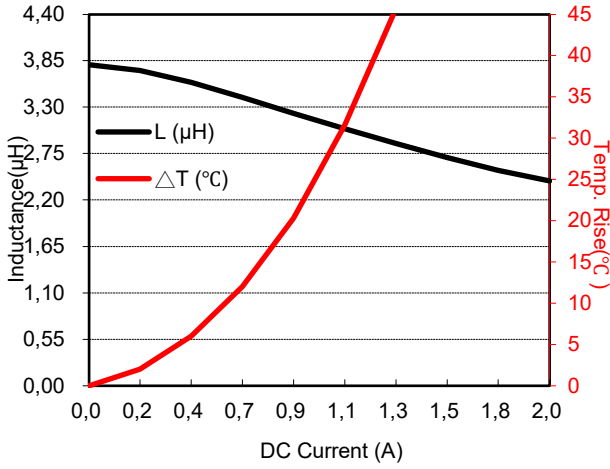


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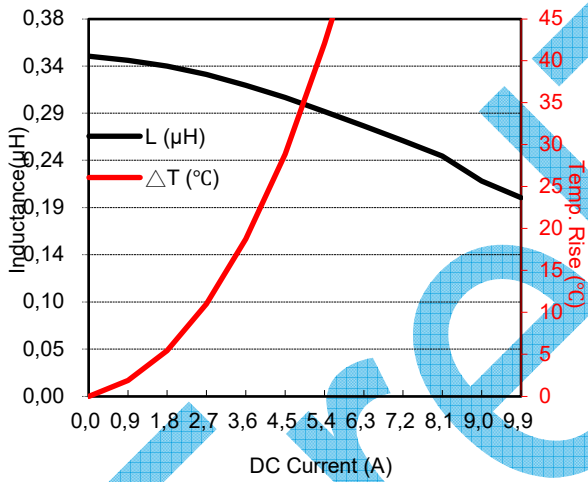


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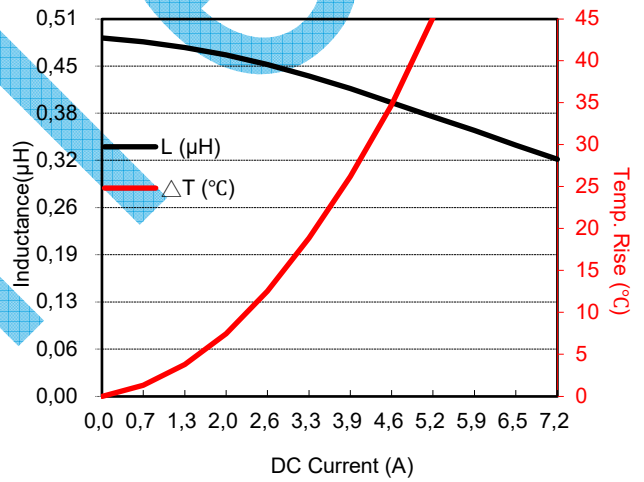
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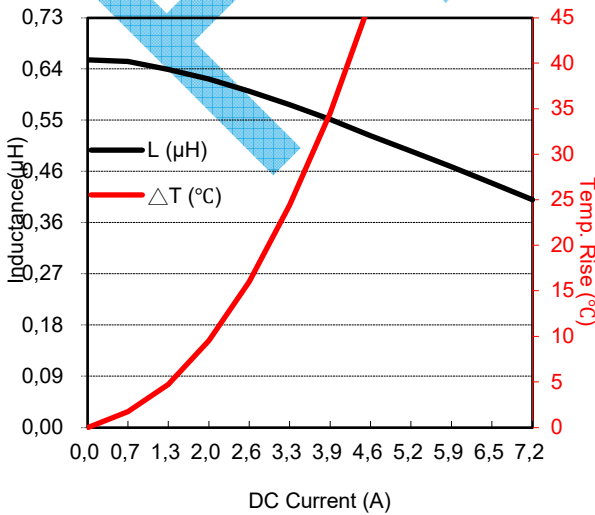
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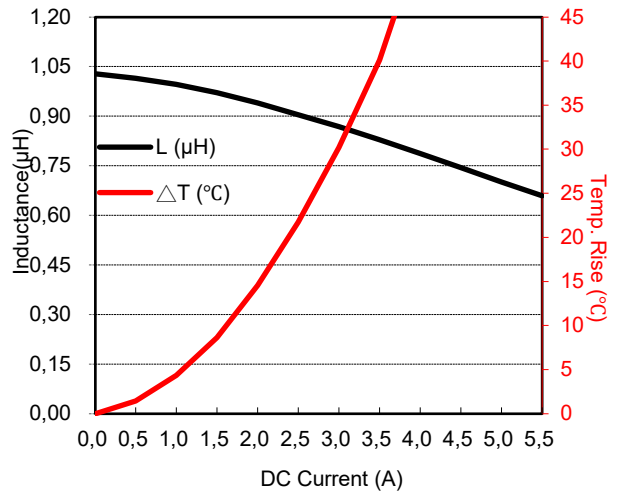
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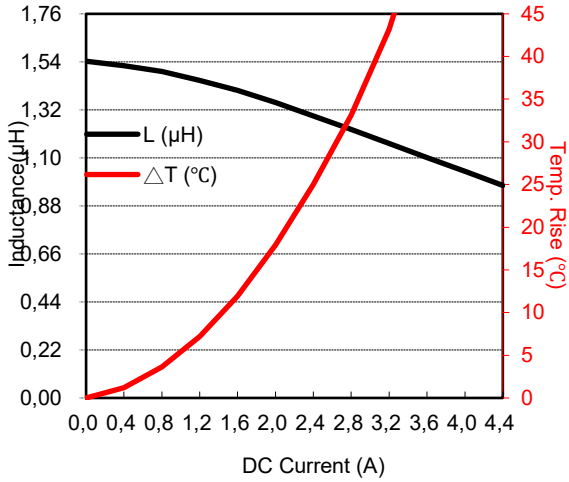


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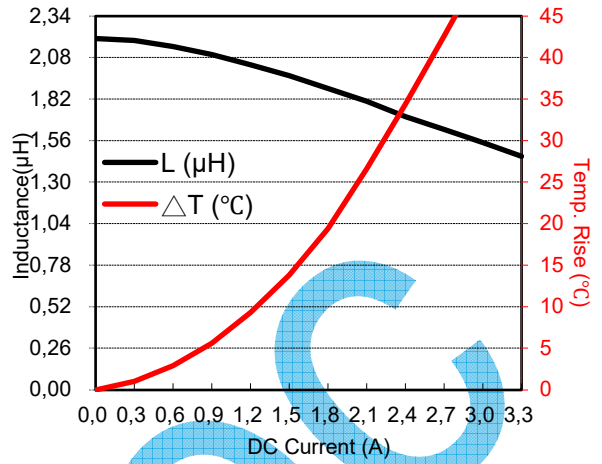
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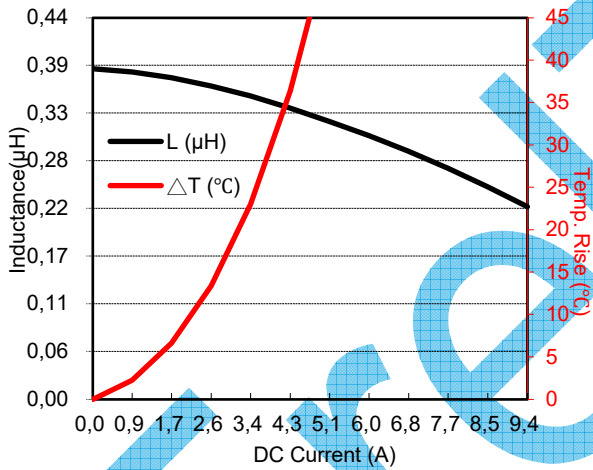


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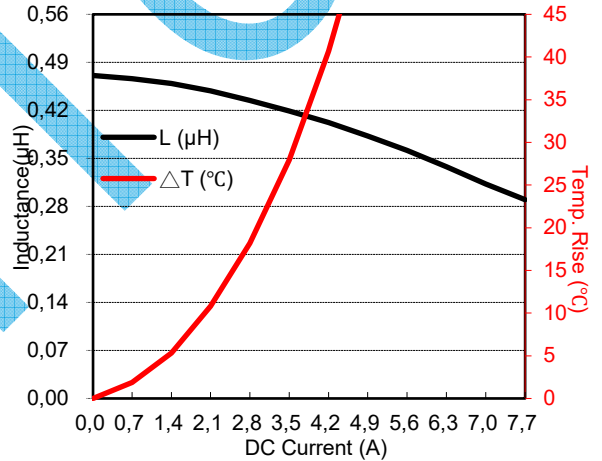
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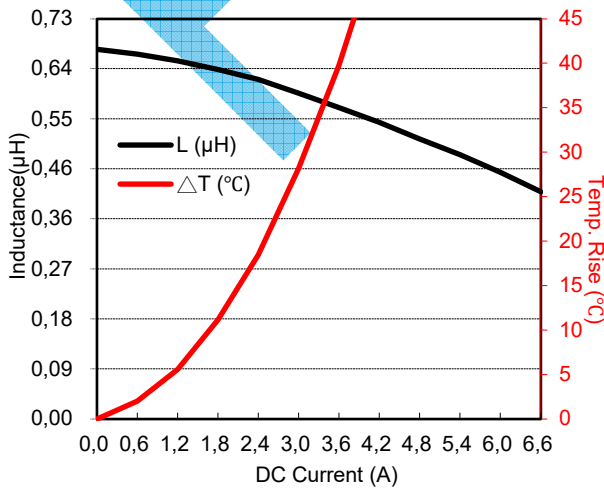
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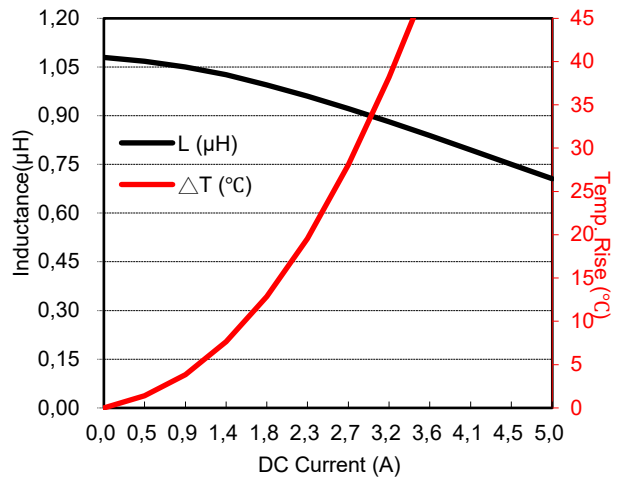
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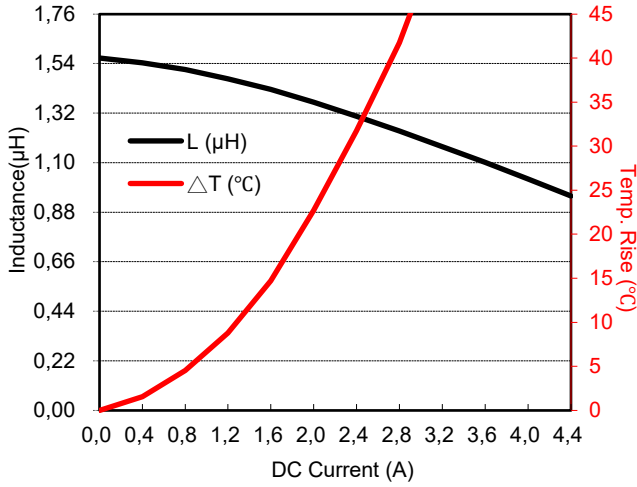


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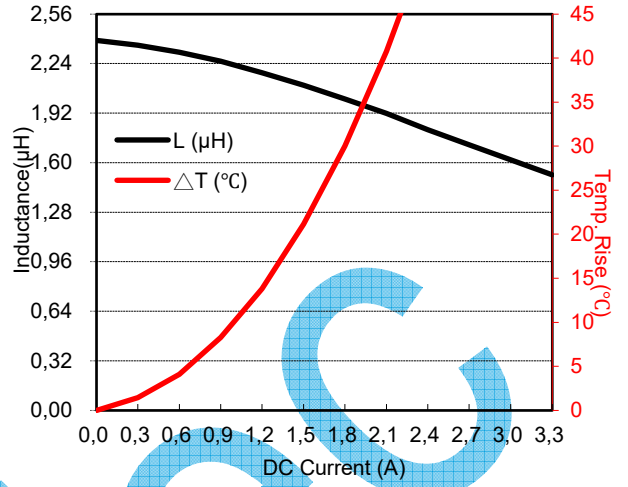
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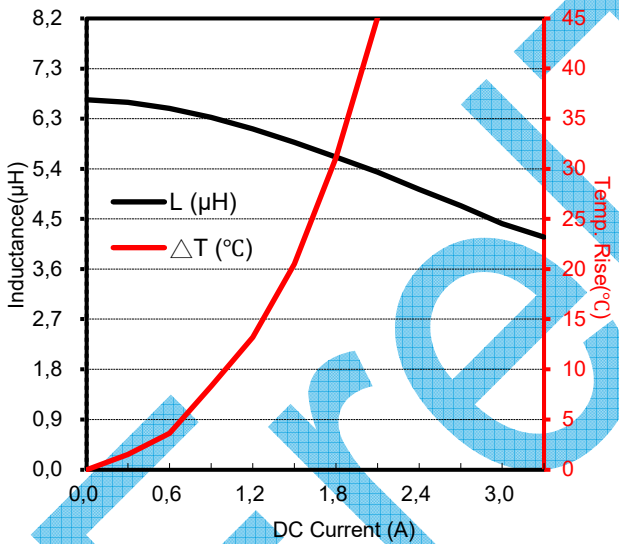


SMD Power Inductors

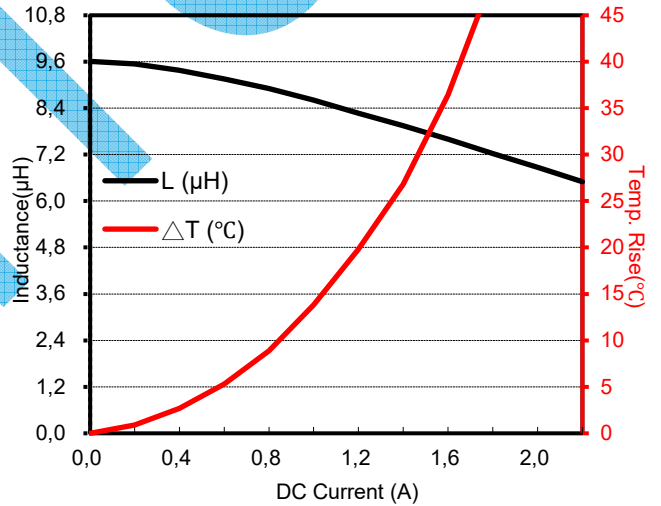
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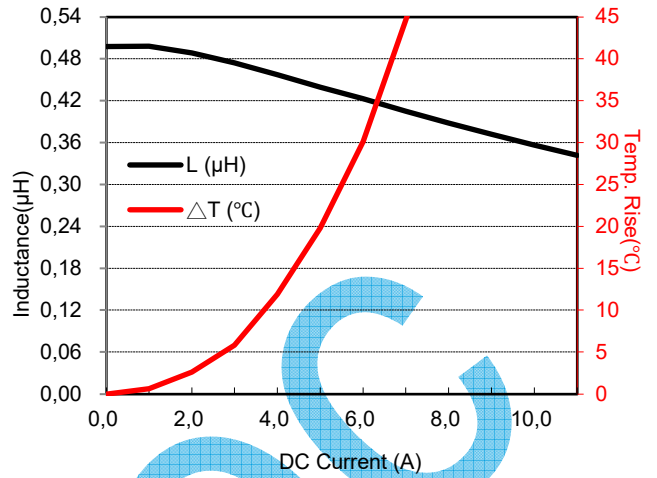
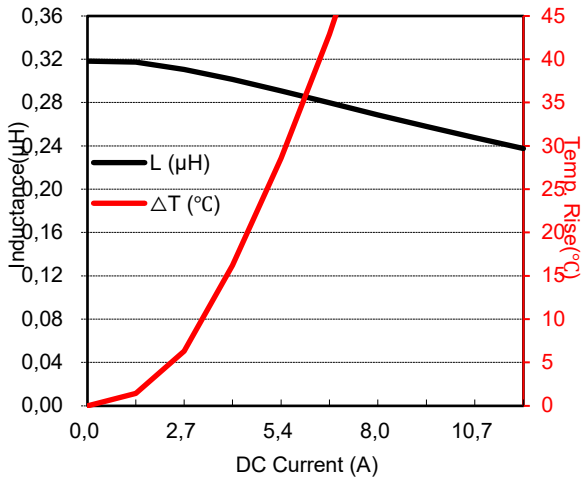


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SMD Power Inductors

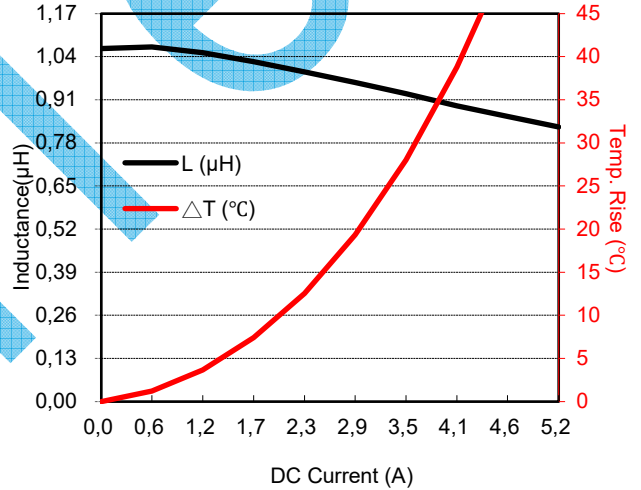
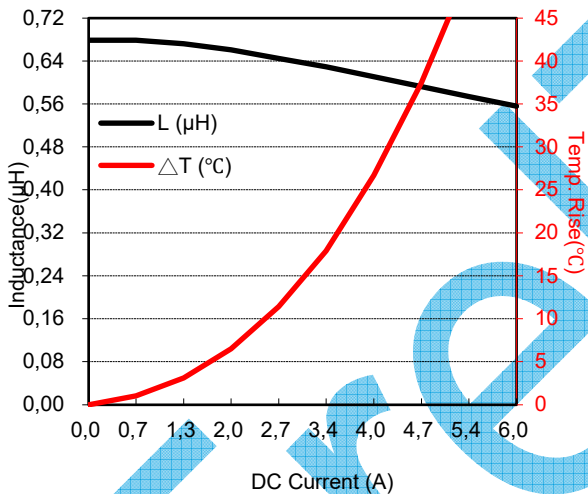
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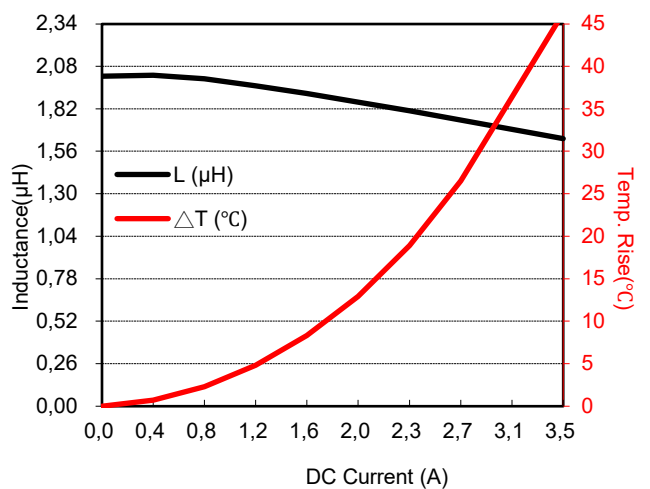
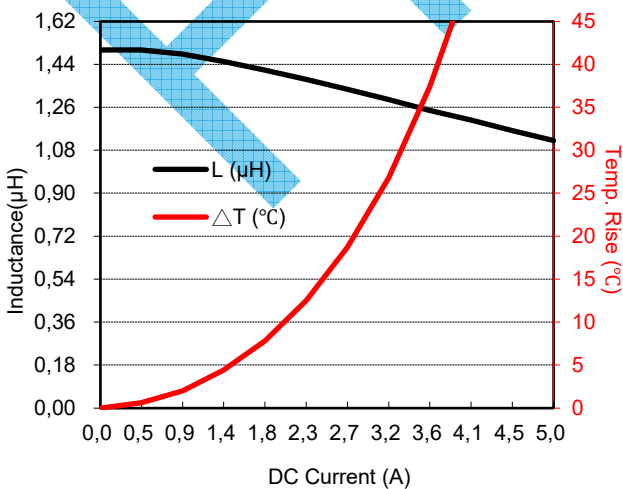
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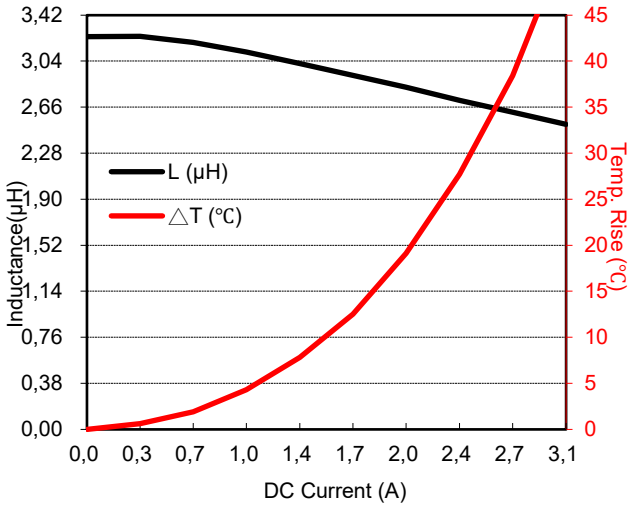
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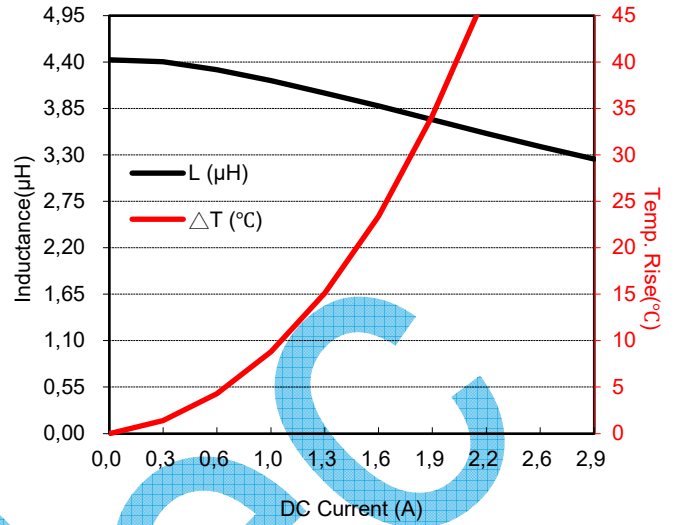
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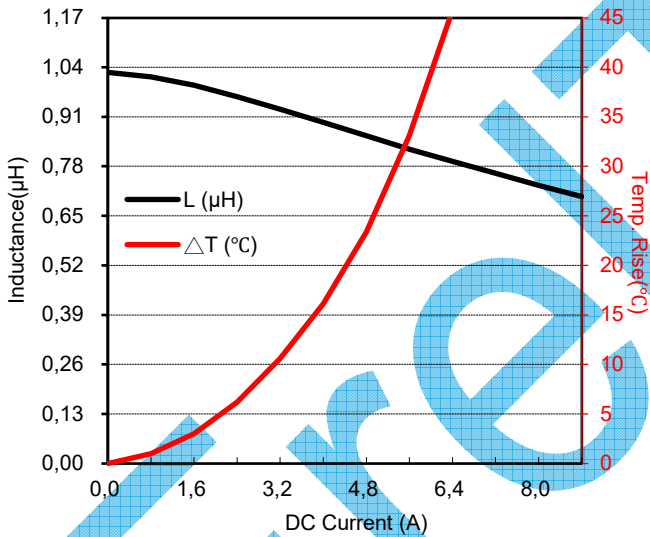


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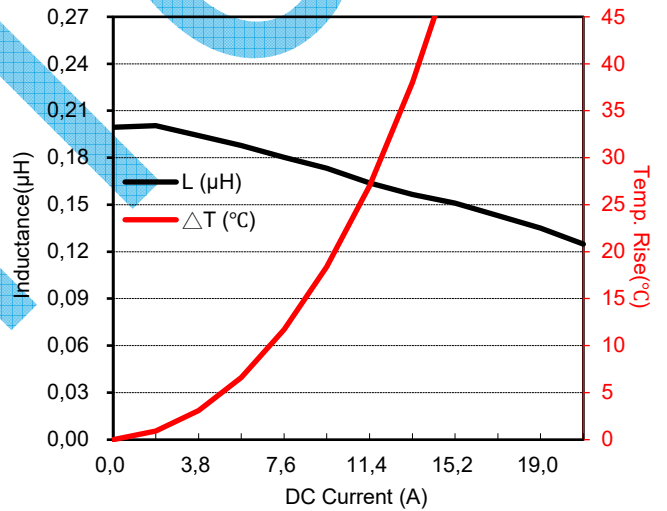
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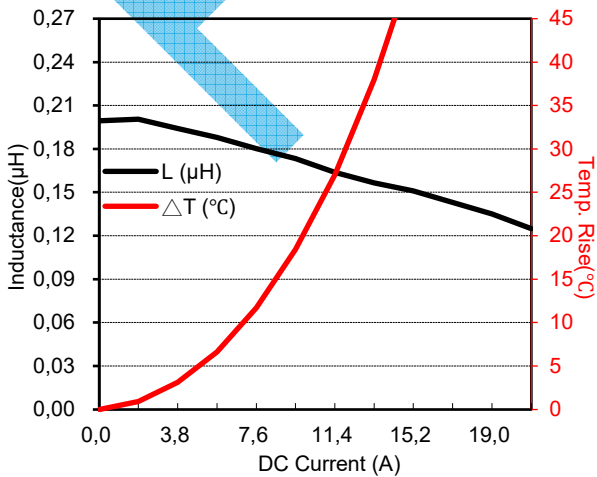
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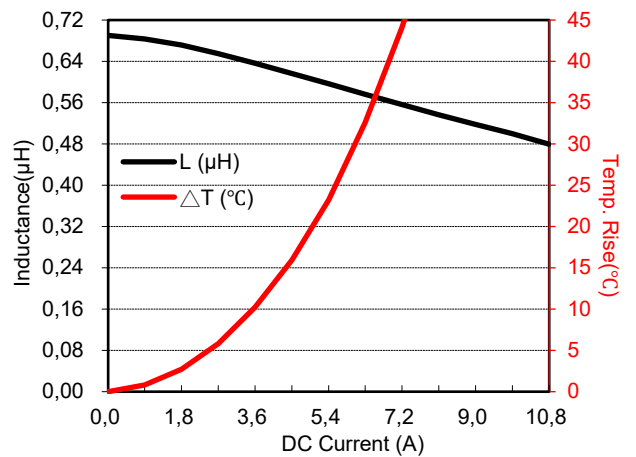
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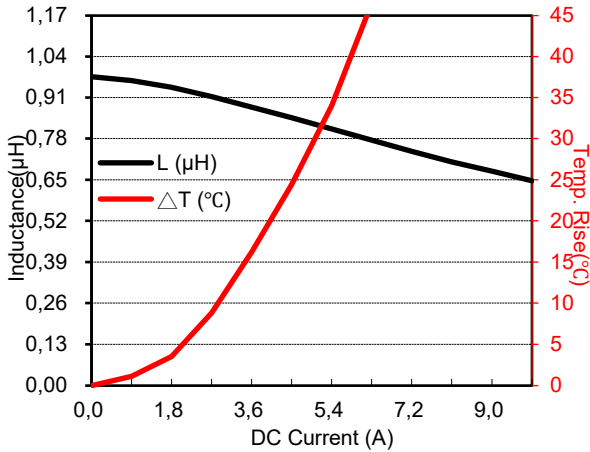


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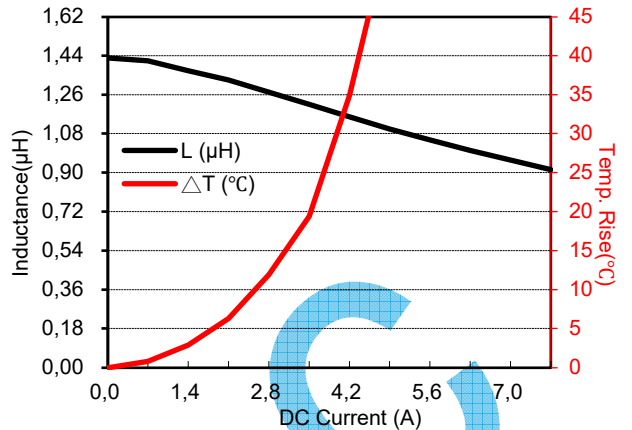
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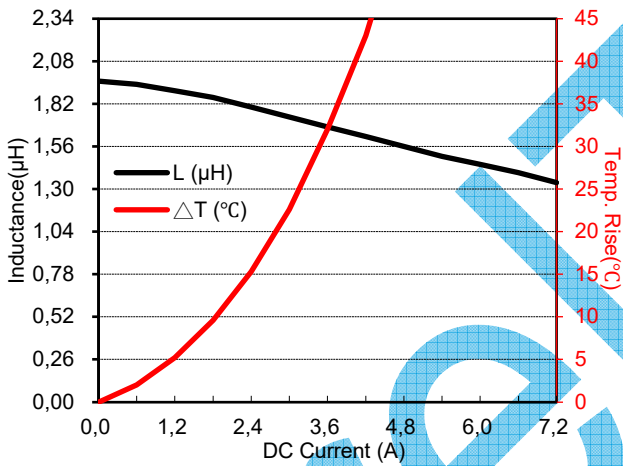


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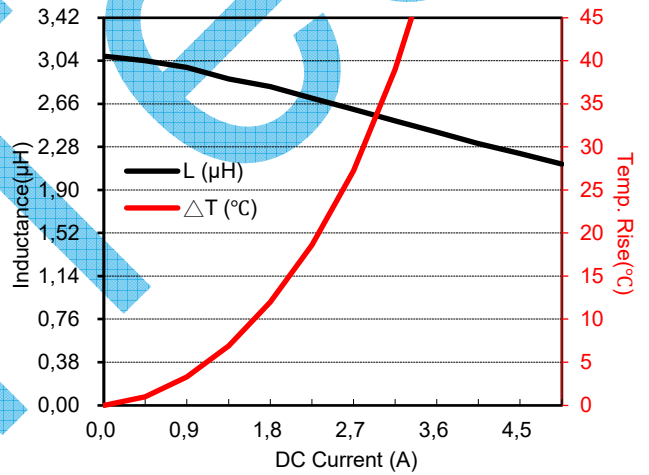
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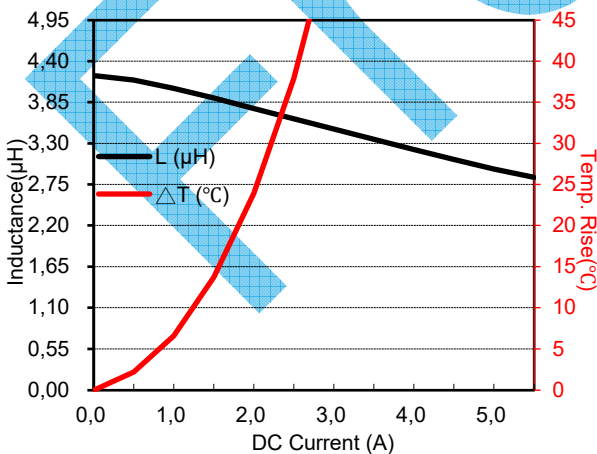
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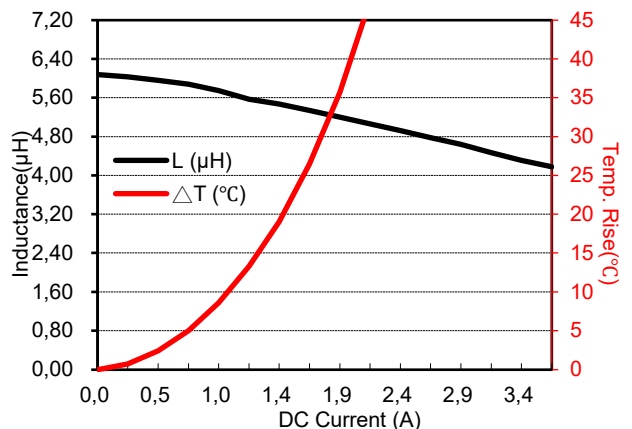
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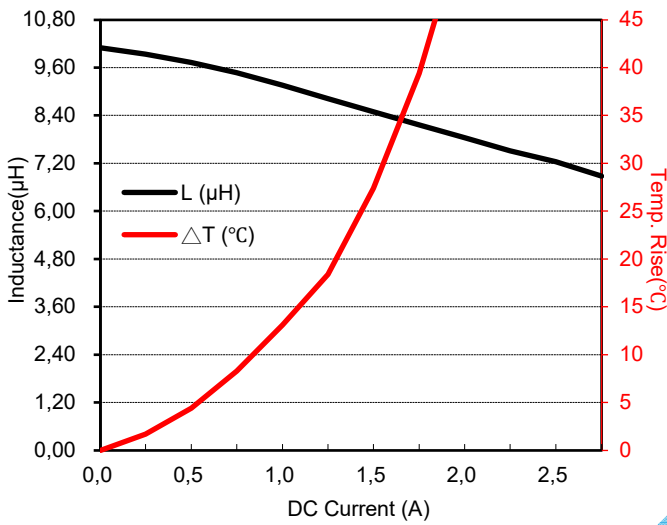


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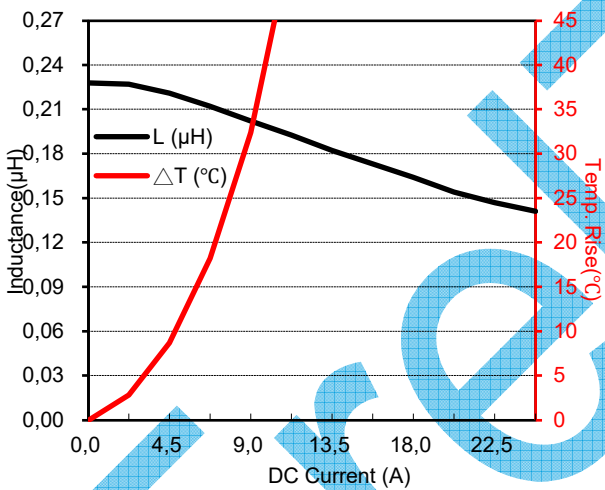


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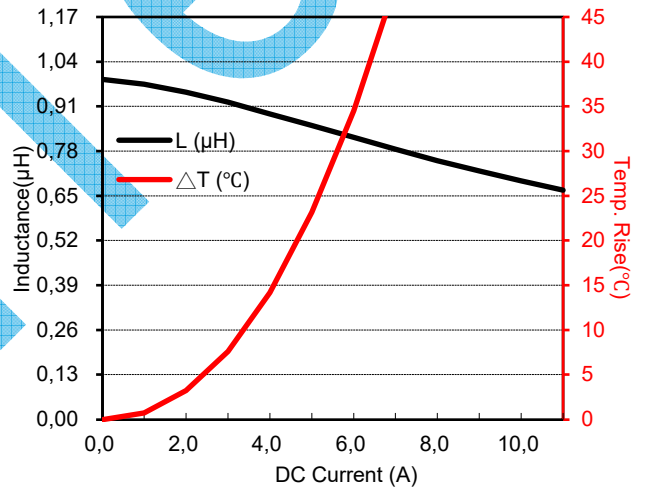
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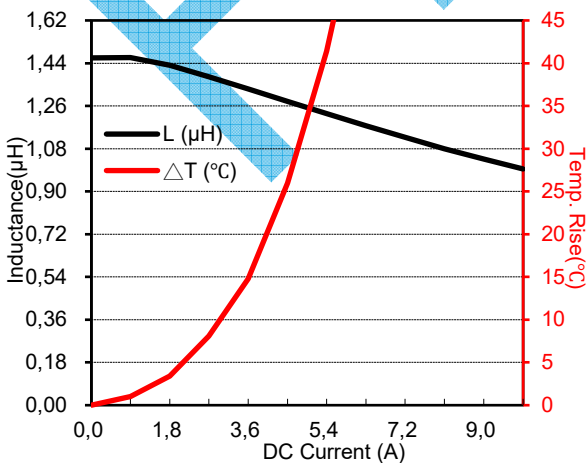
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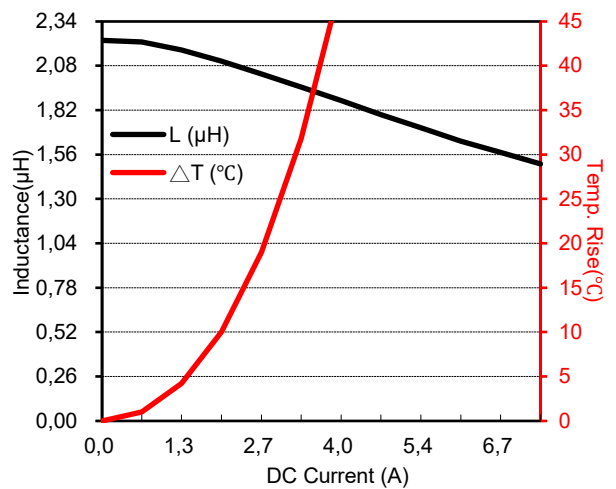
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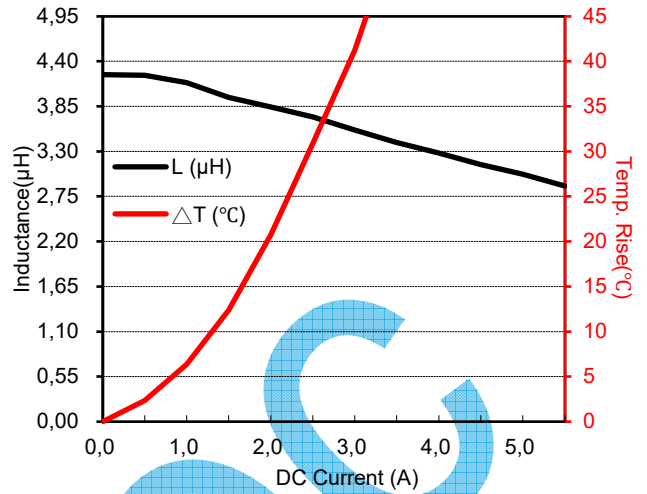
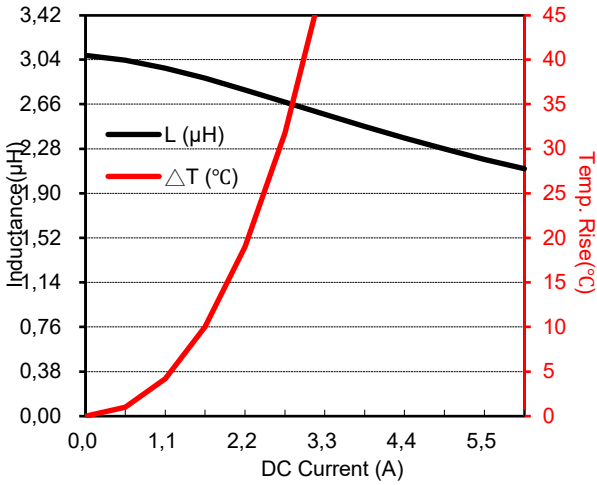


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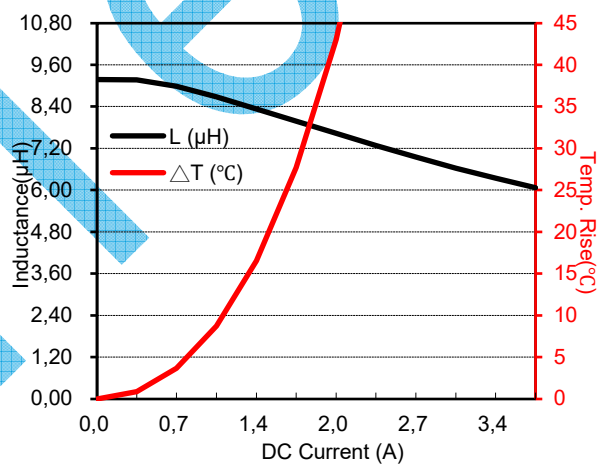
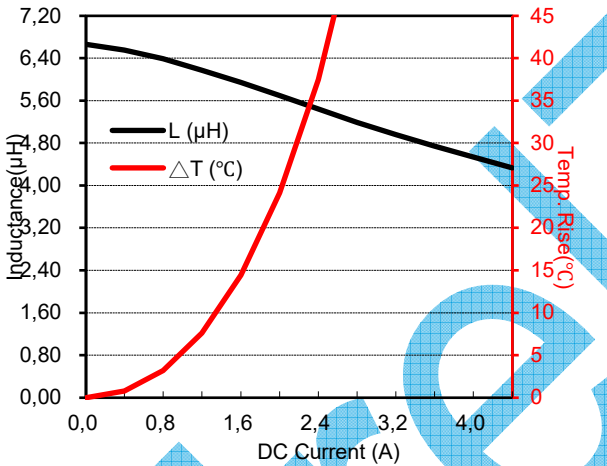
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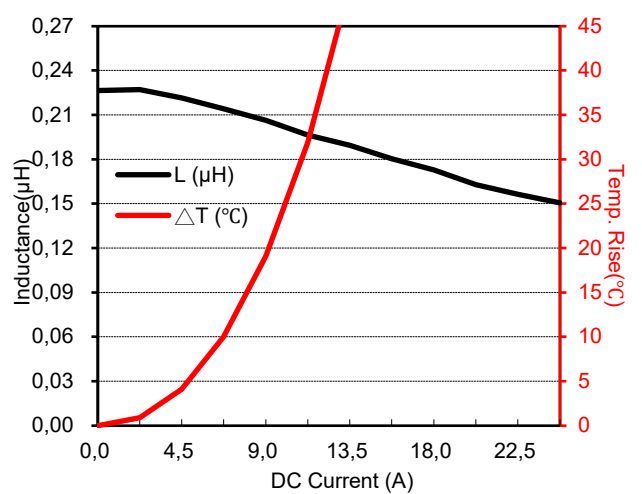
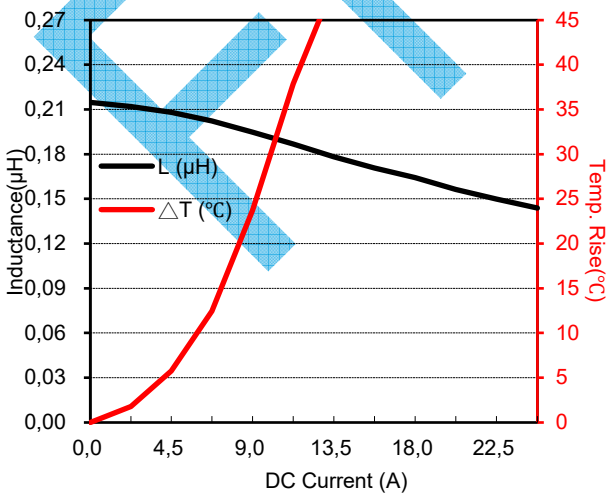
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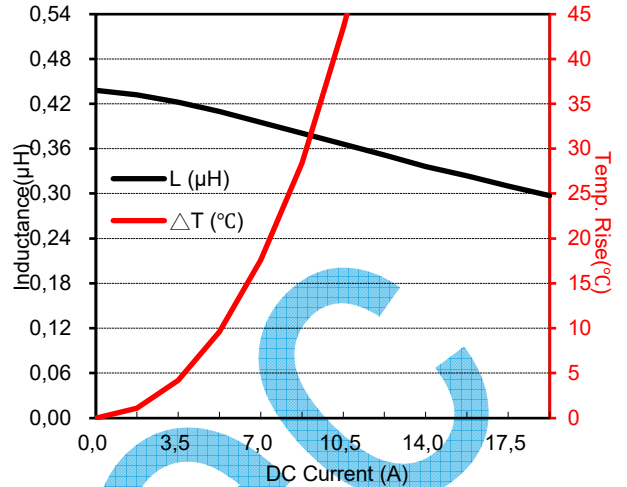
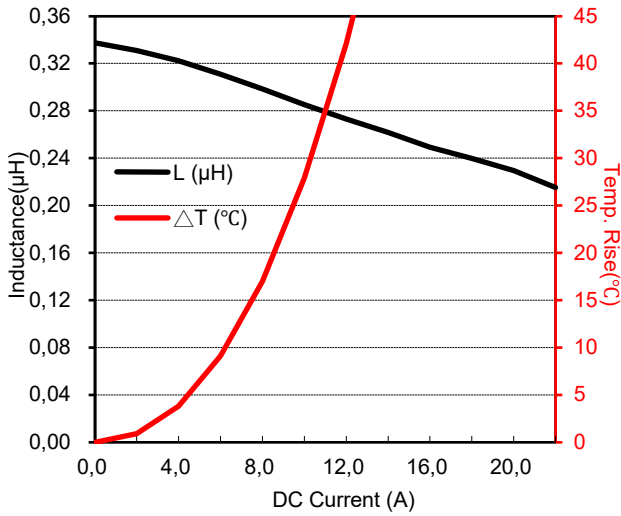


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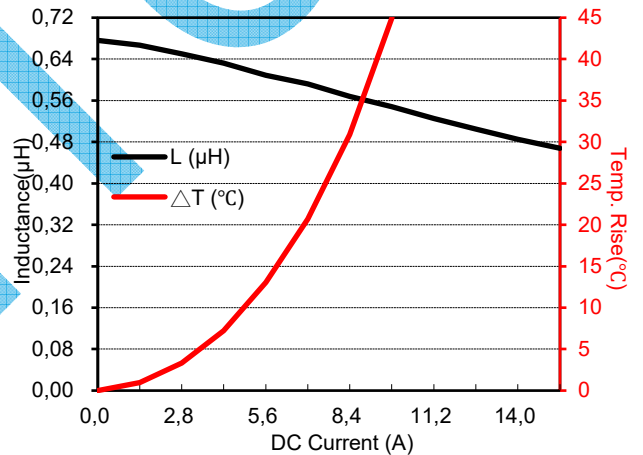
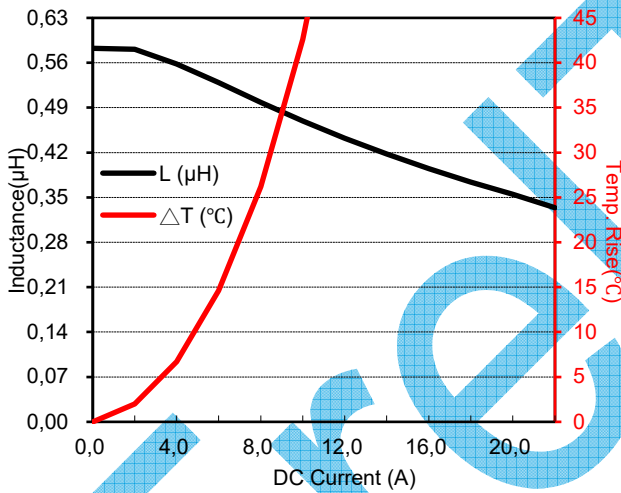
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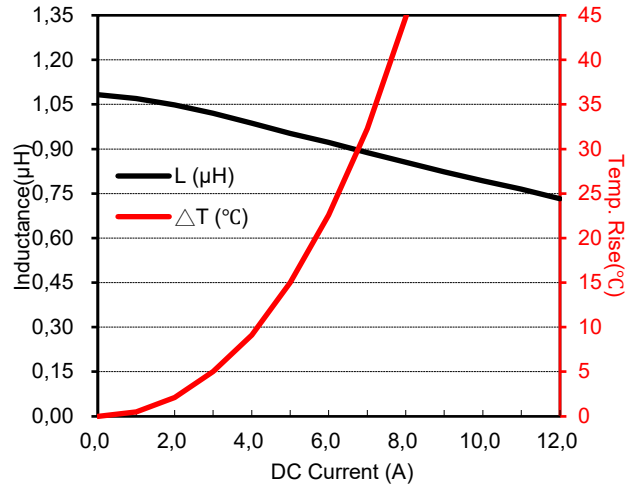
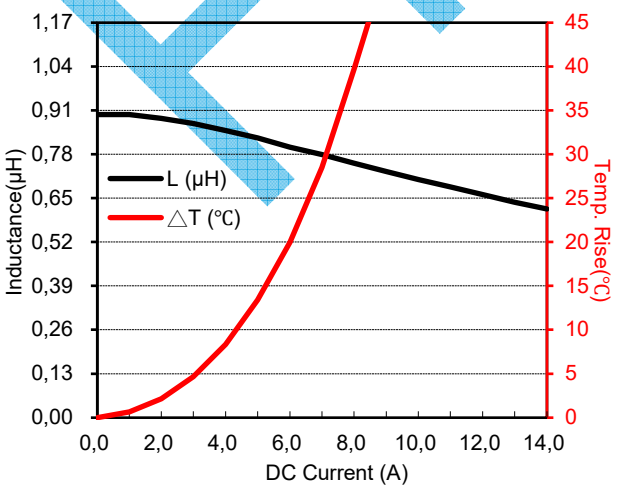
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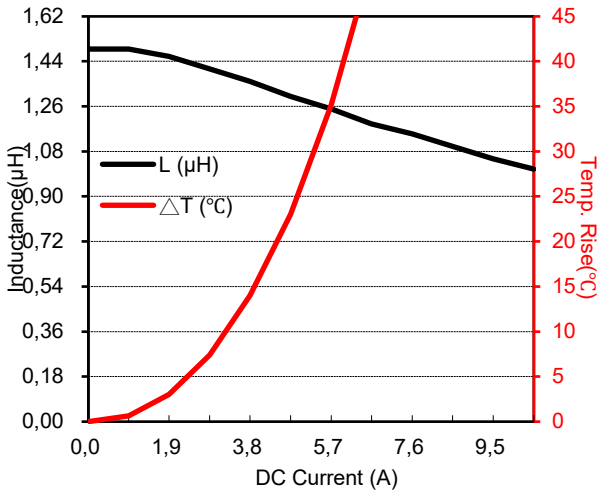
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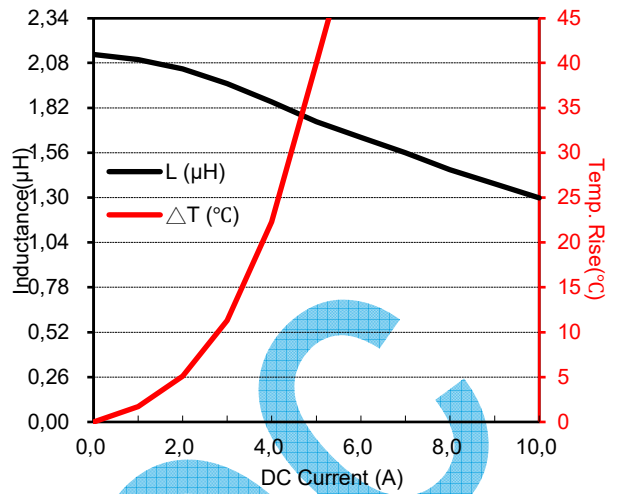
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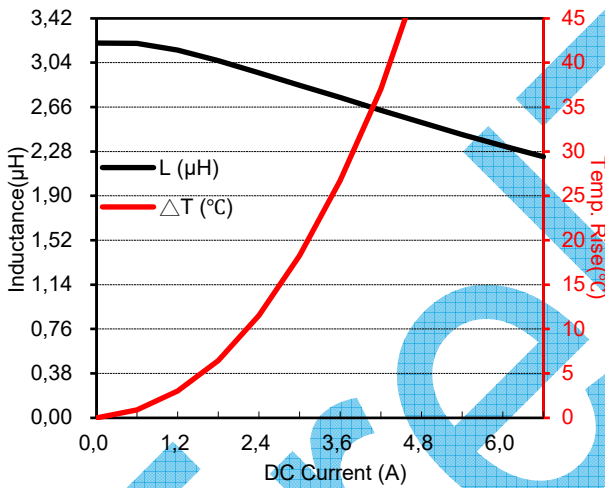


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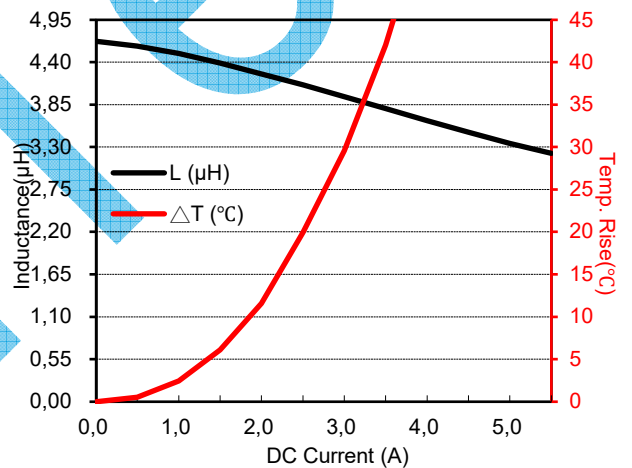
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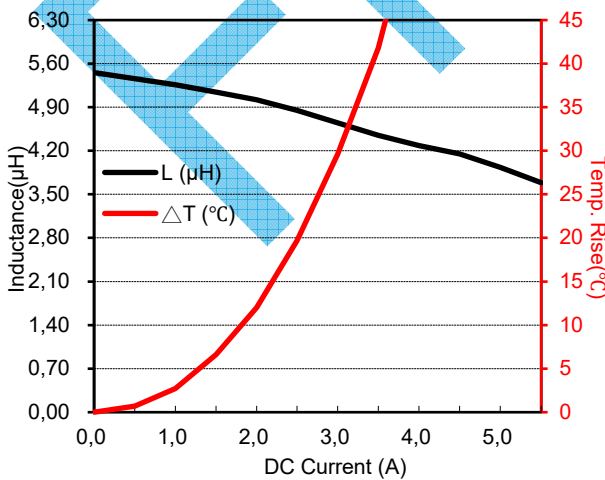
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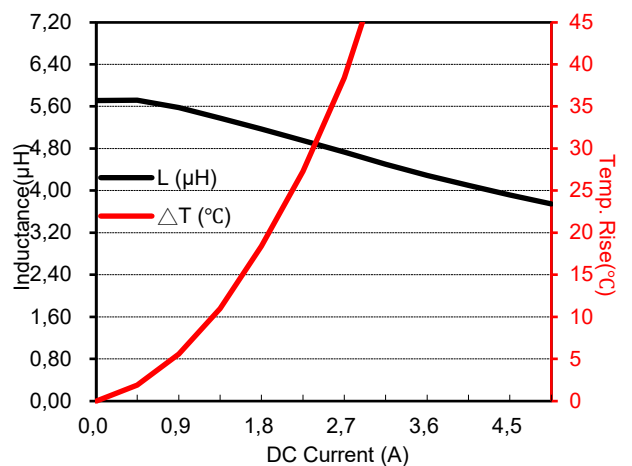
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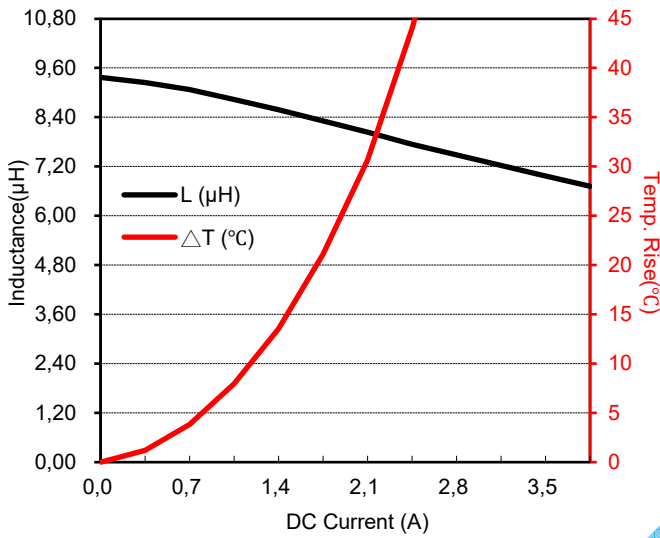


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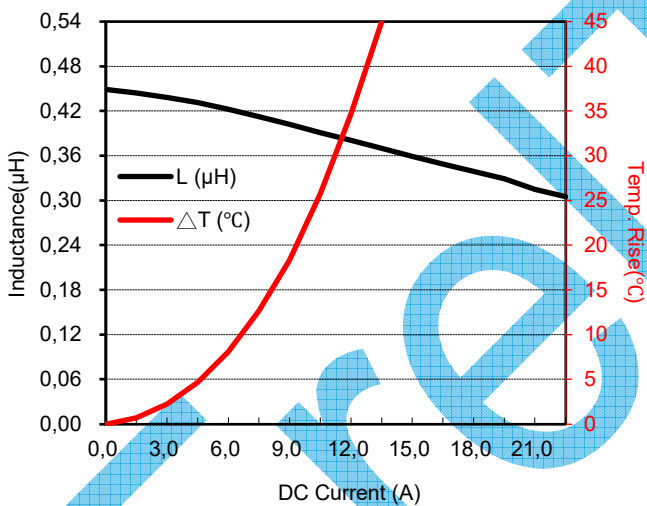


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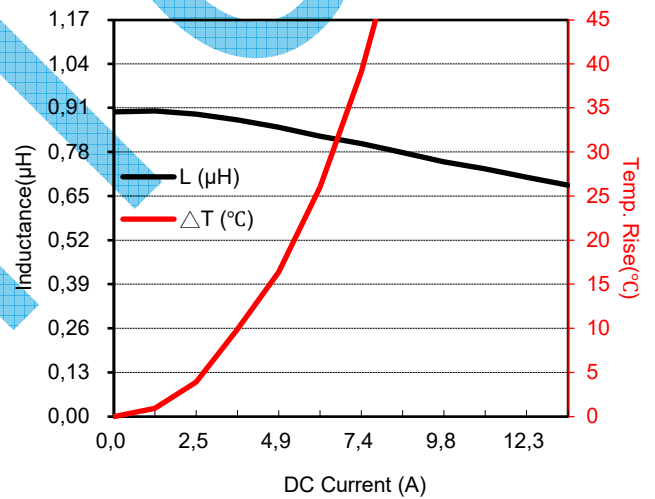
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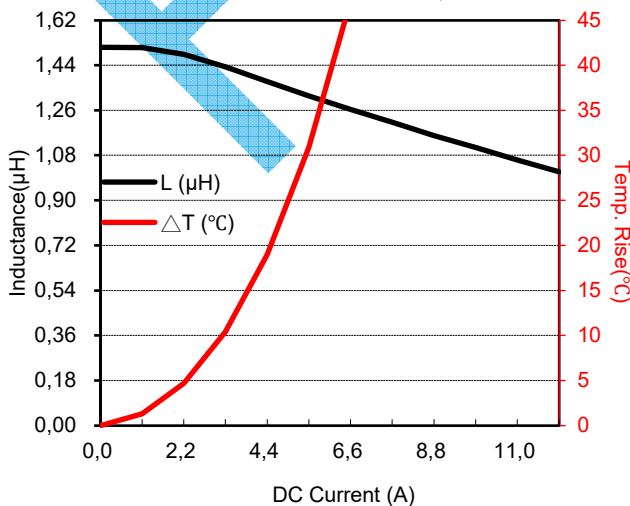
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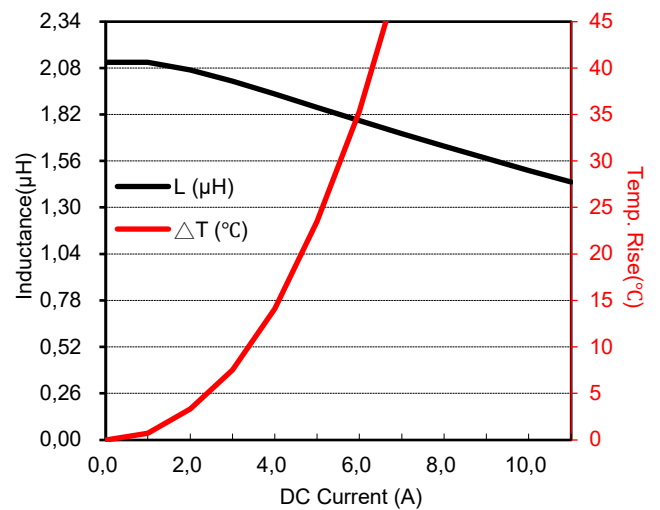
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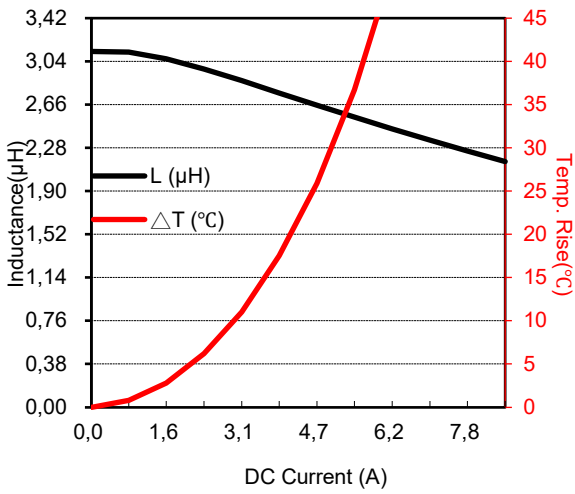


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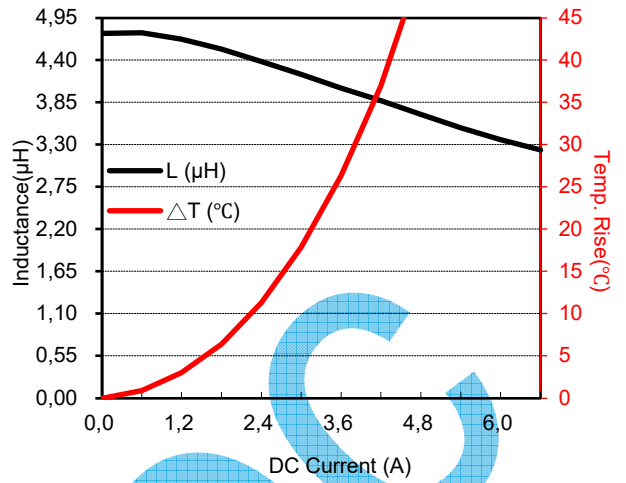
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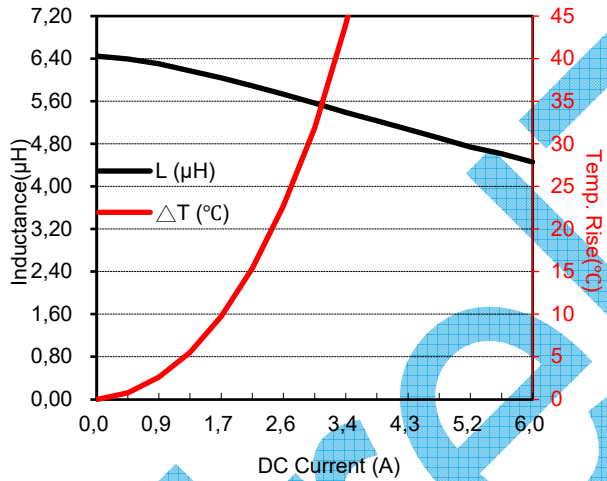


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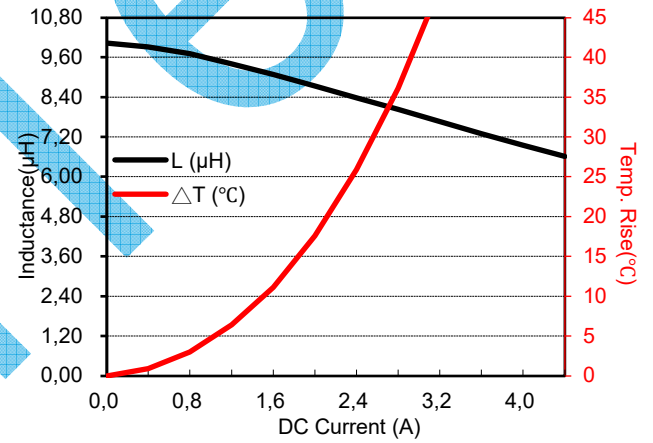
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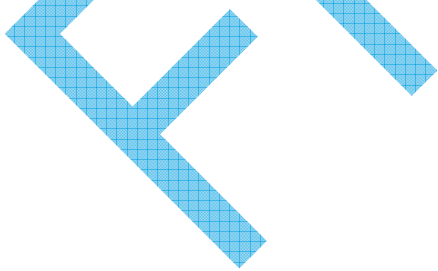
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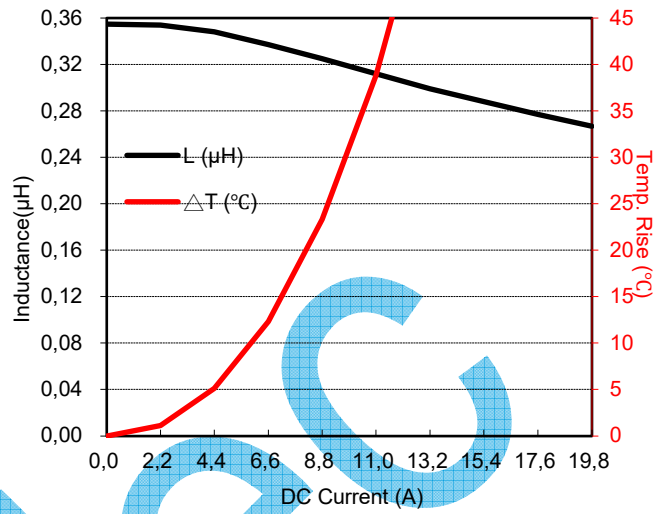
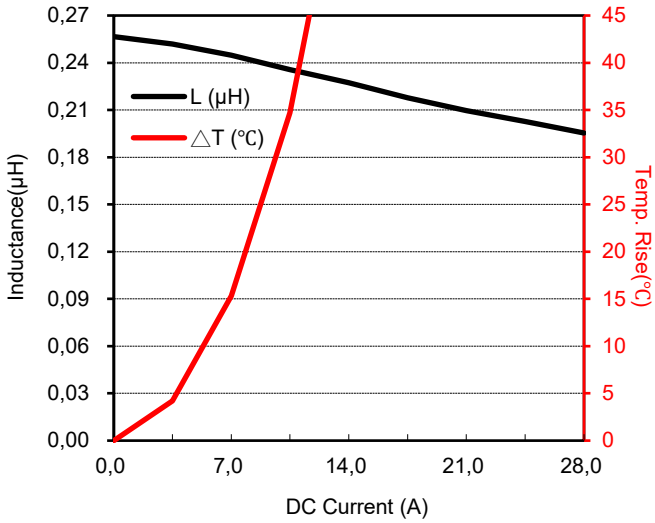


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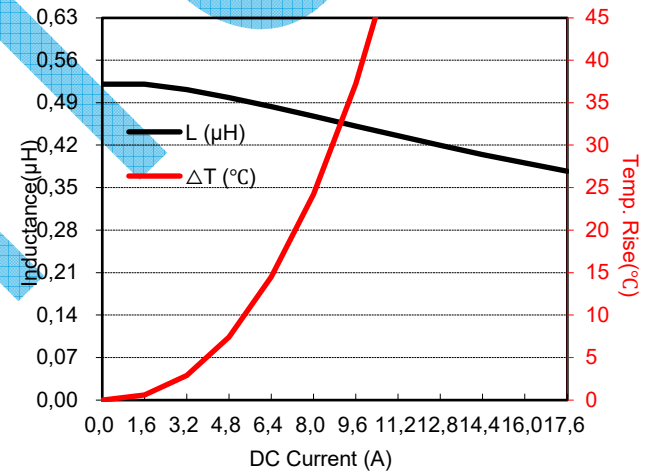
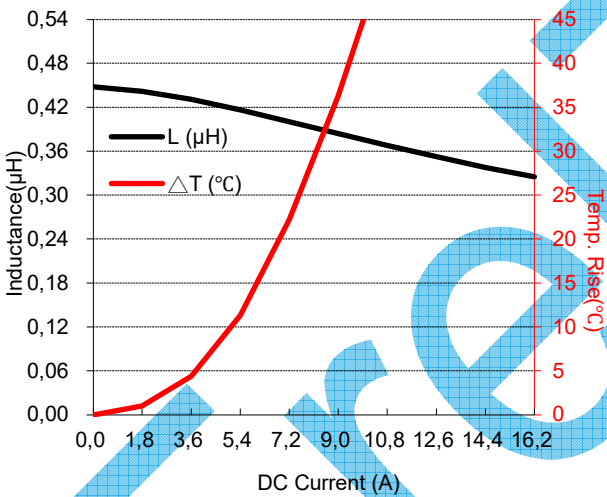
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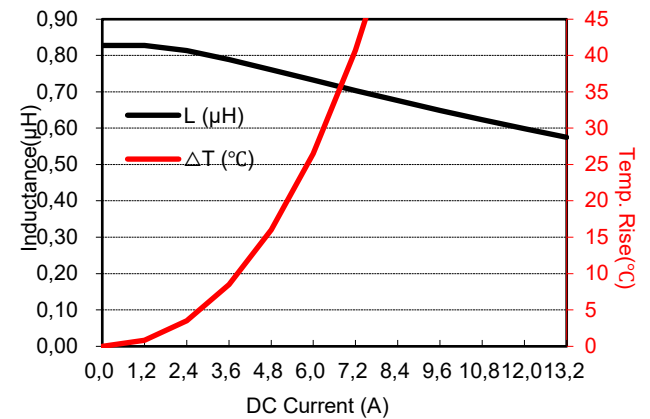
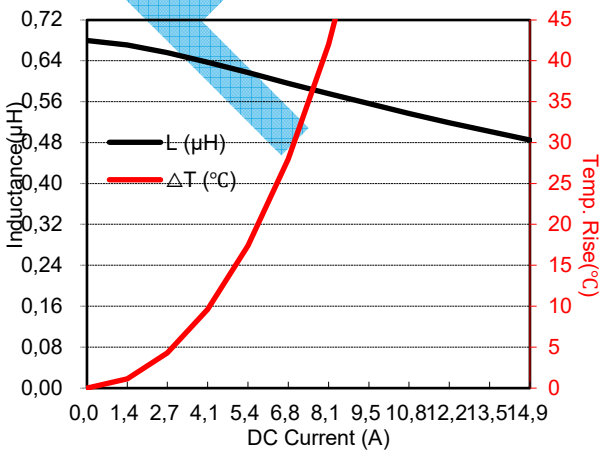
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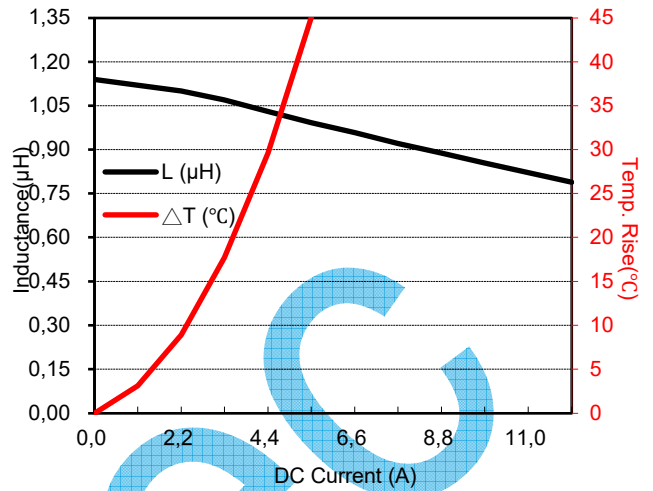
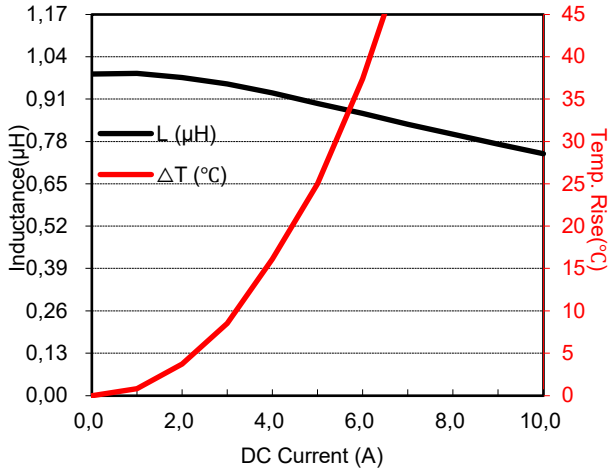


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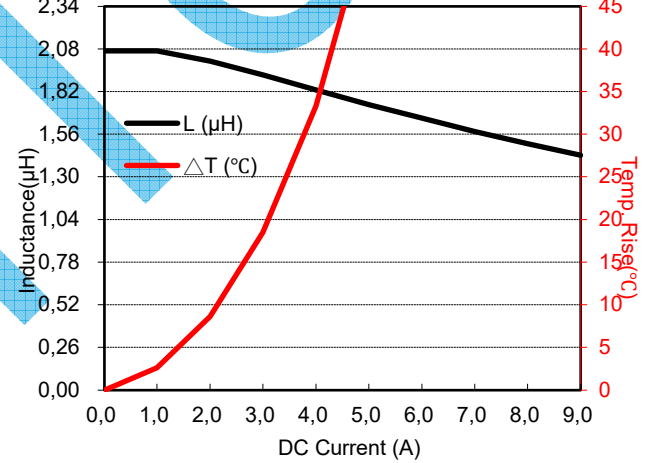
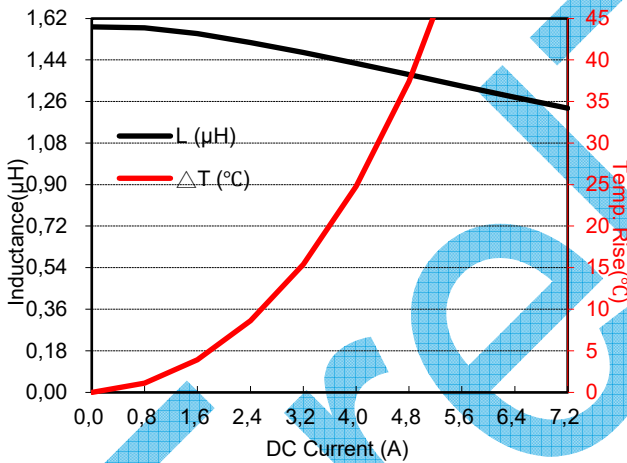
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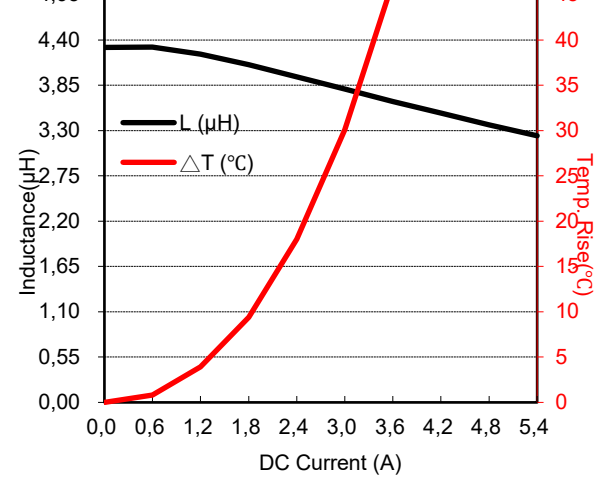
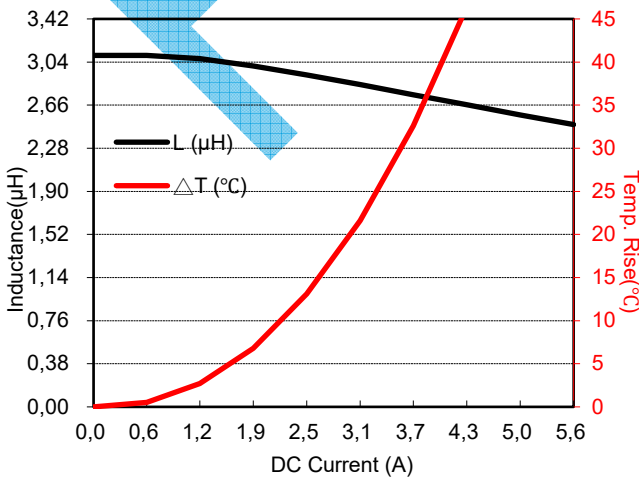
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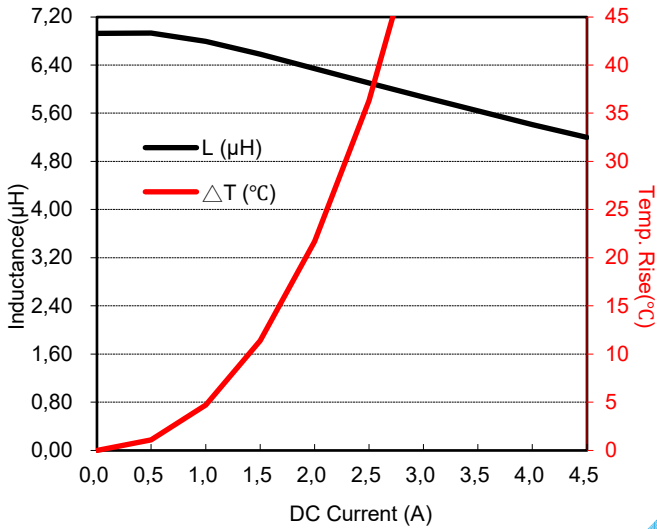
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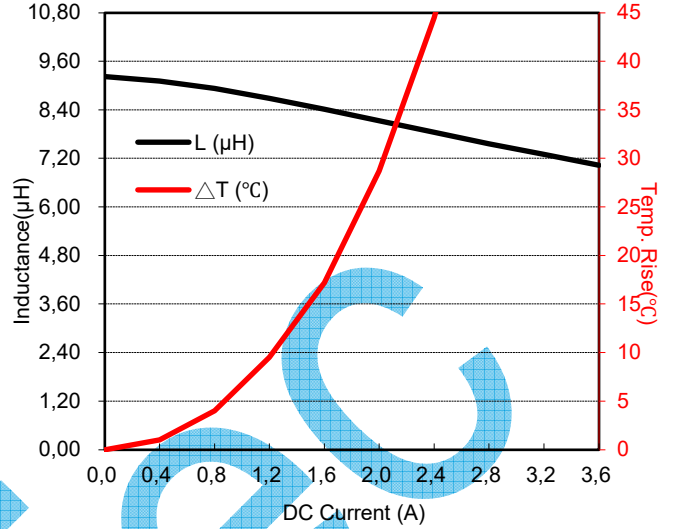
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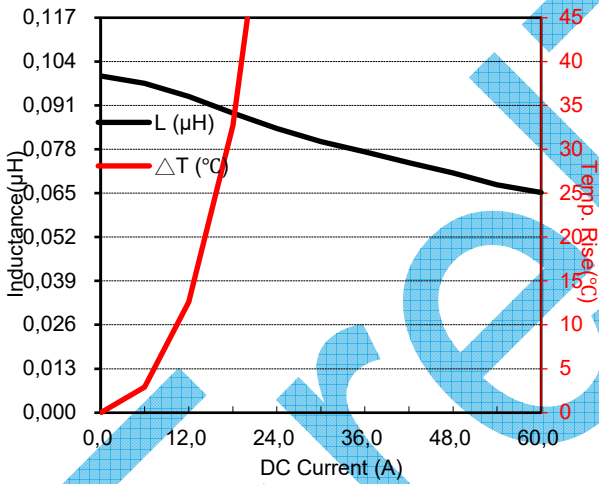


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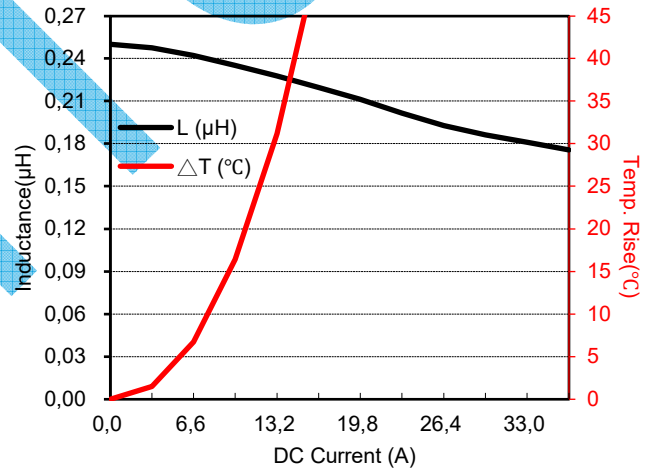
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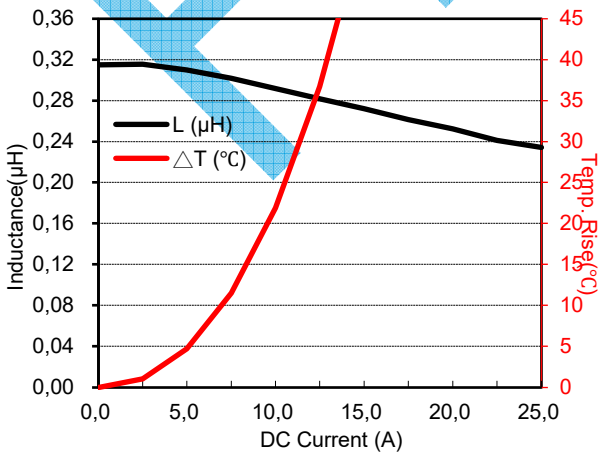
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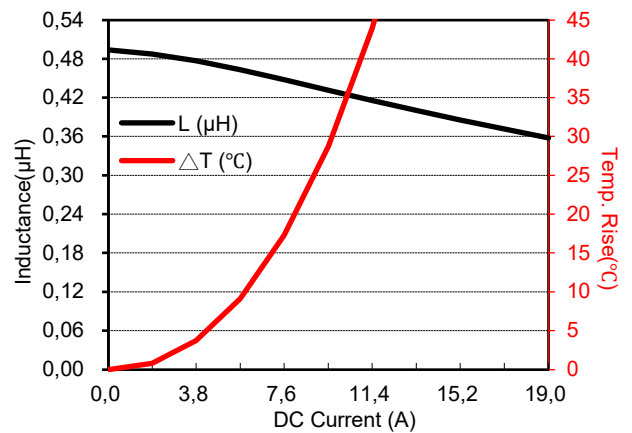
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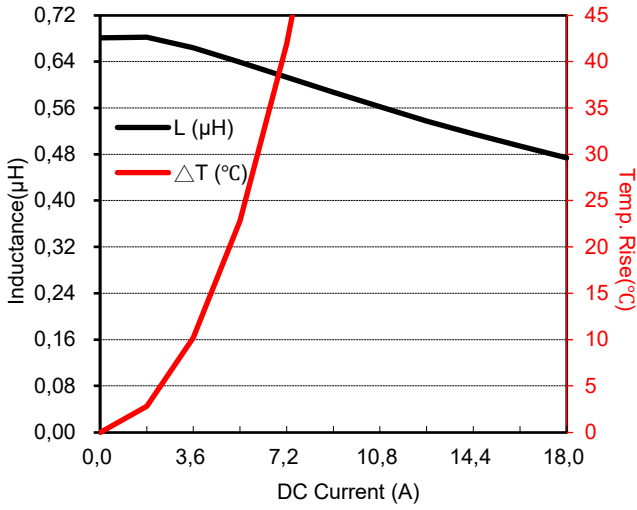


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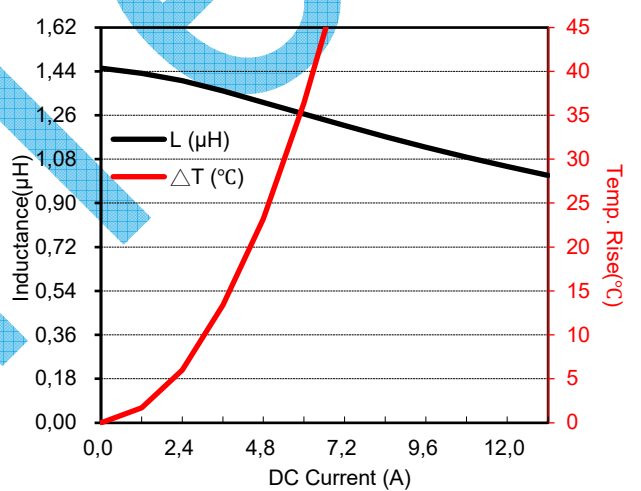
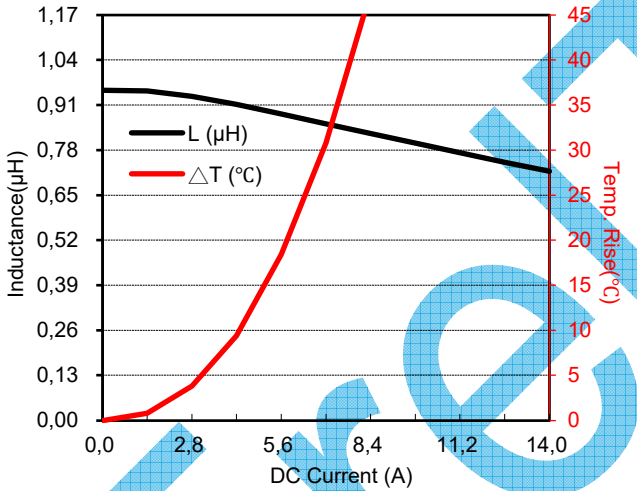
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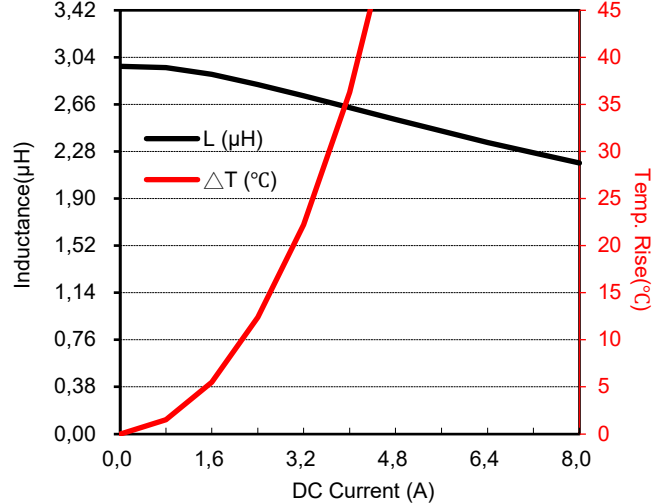
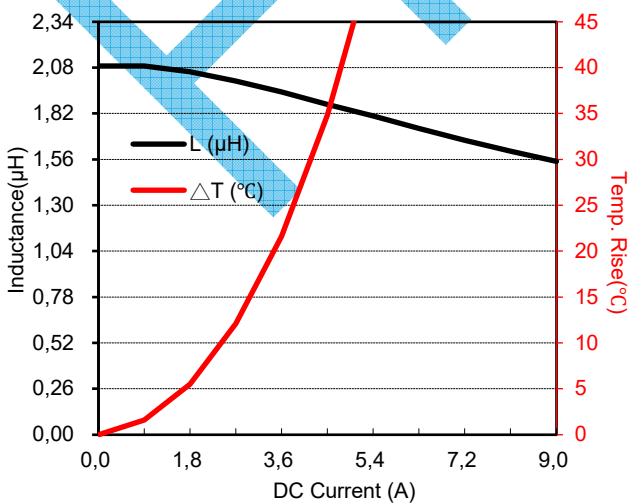
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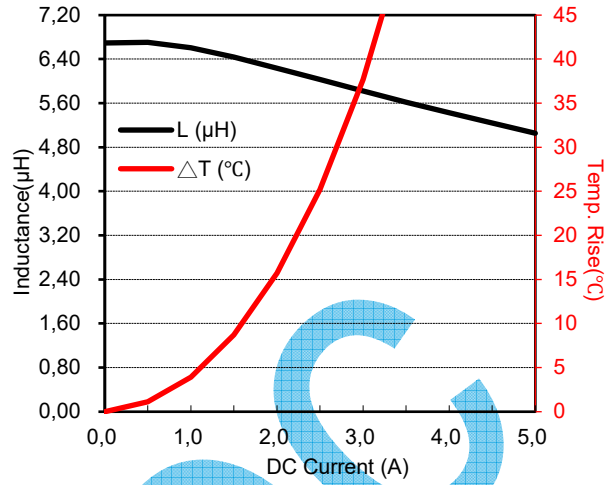
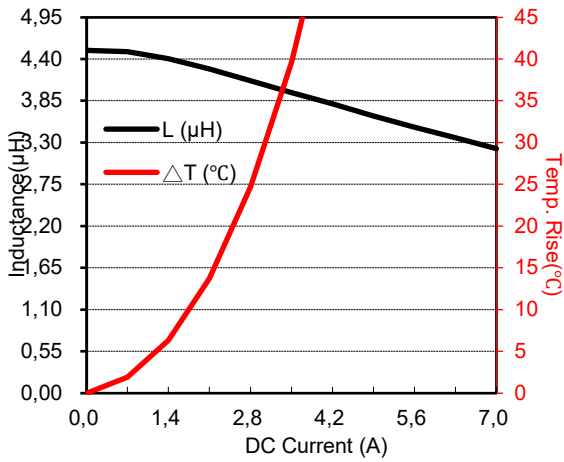


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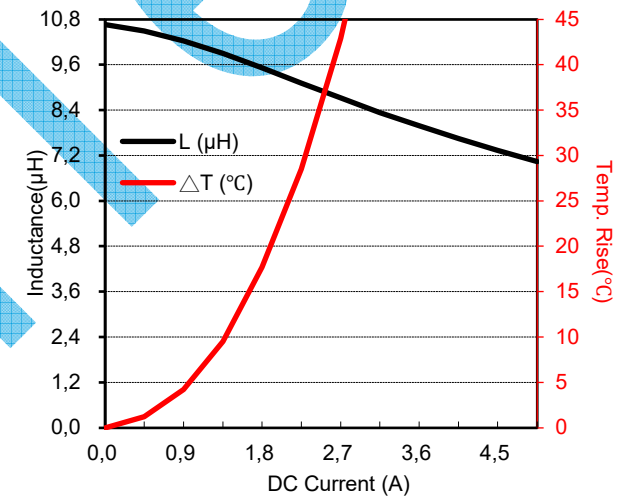
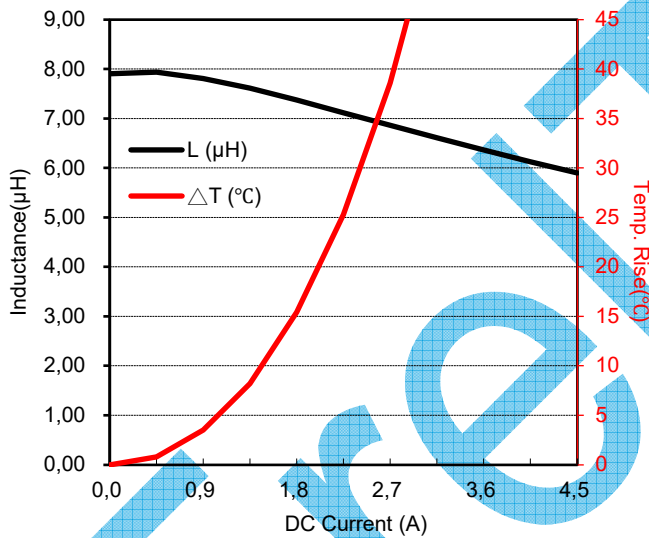
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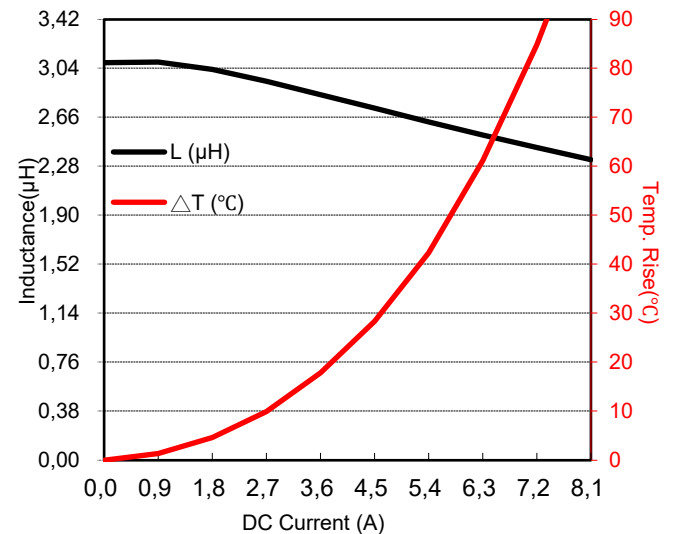
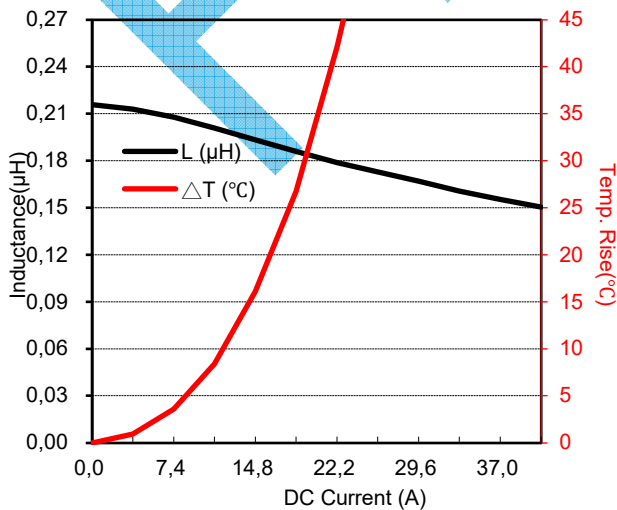
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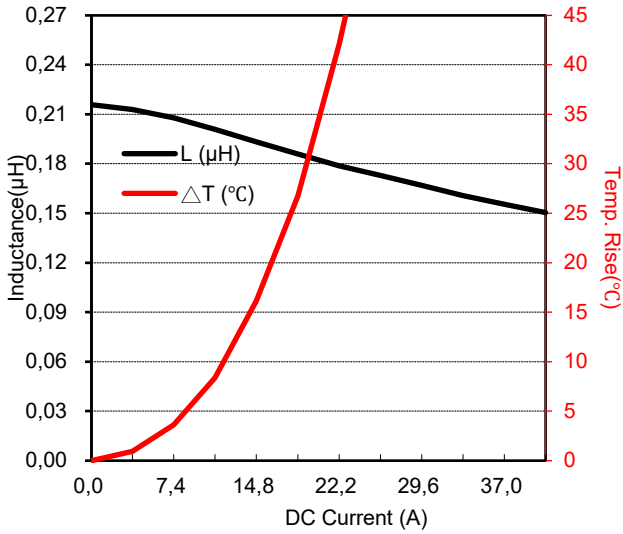
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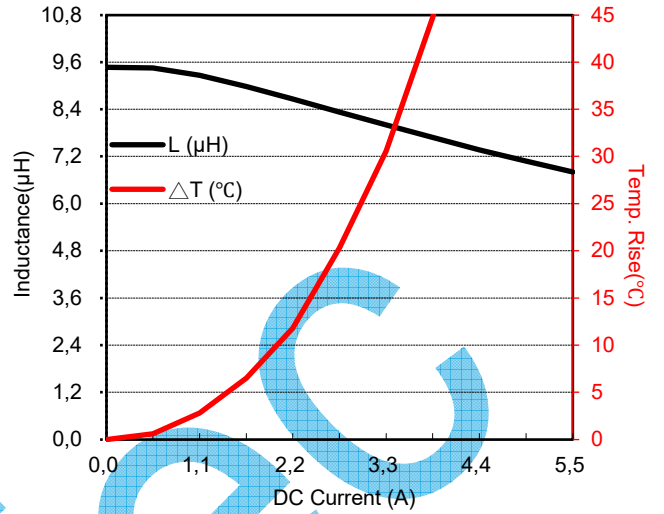
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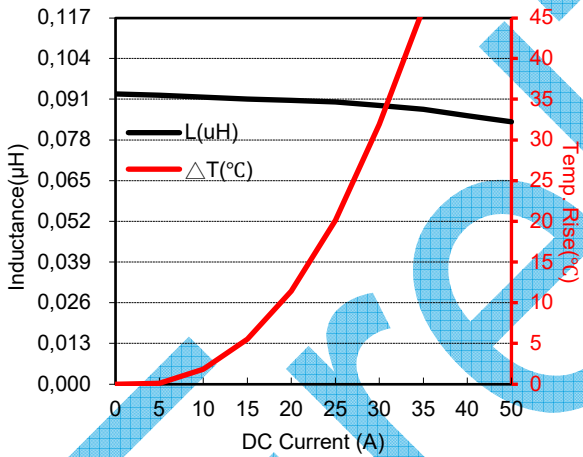


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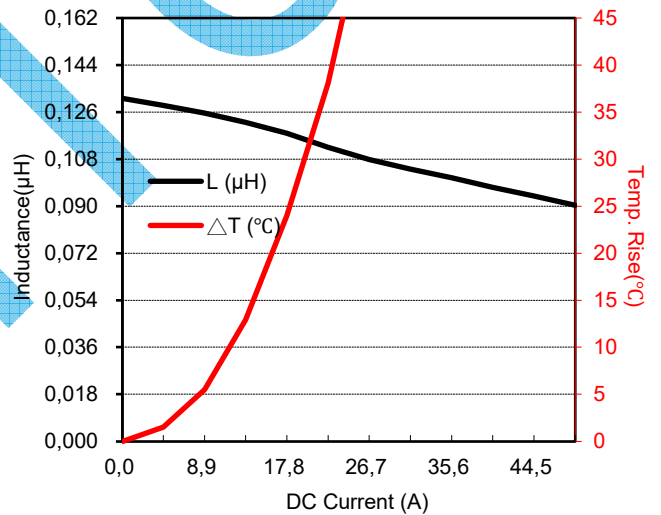
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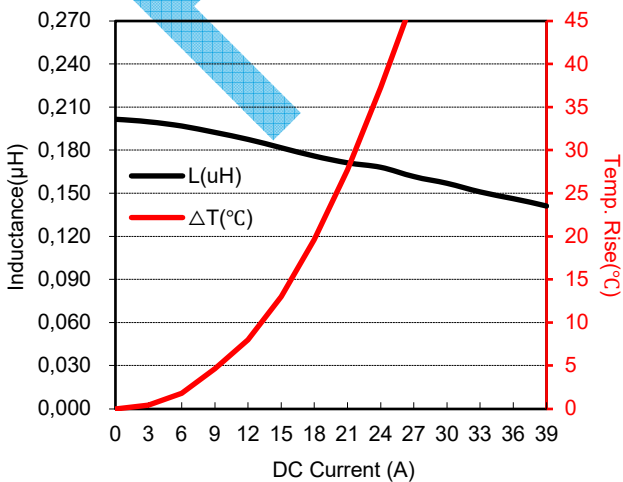
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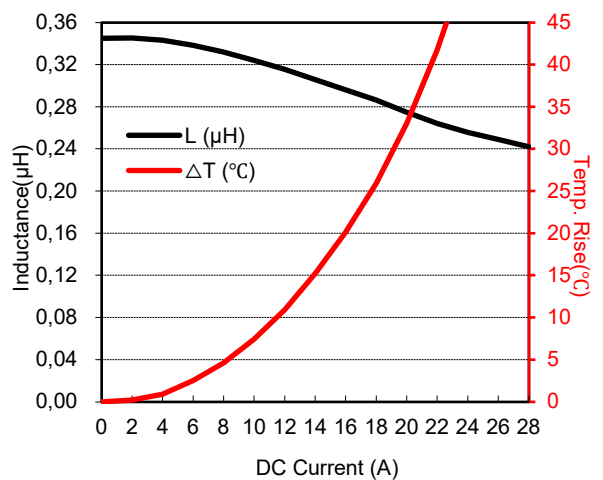
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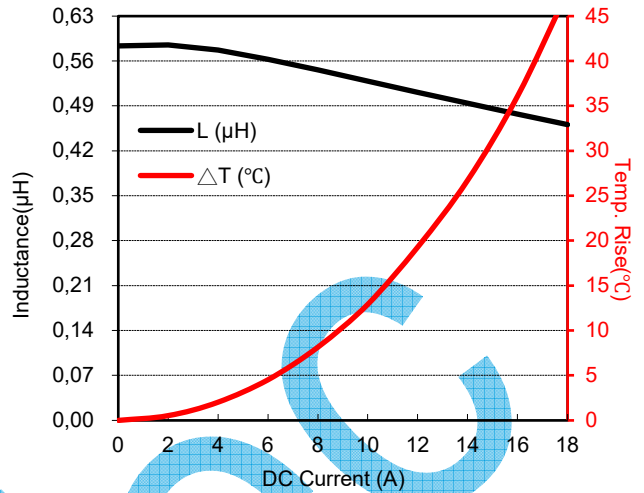
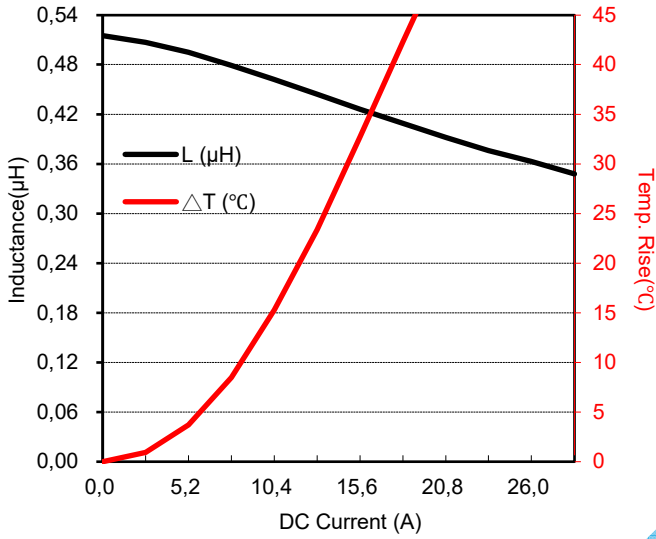


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SMD Power Inductors

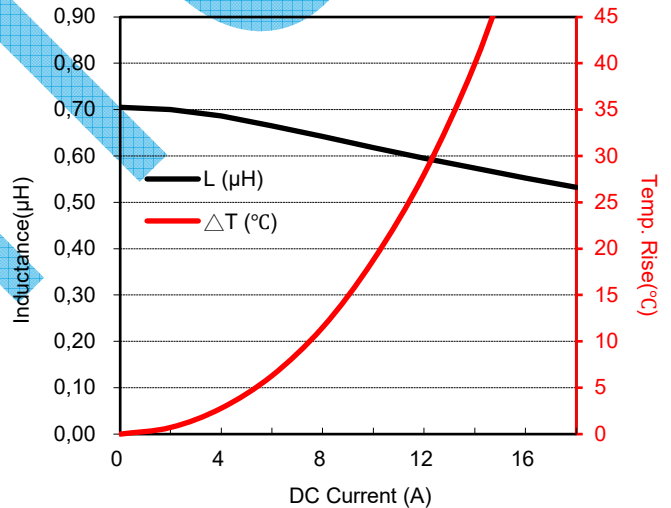
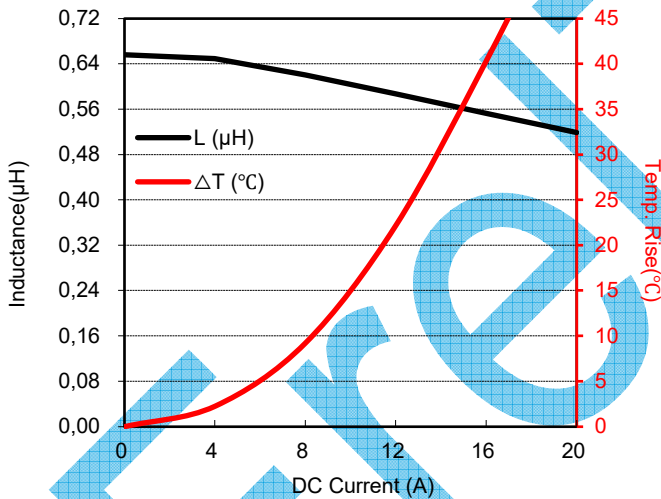
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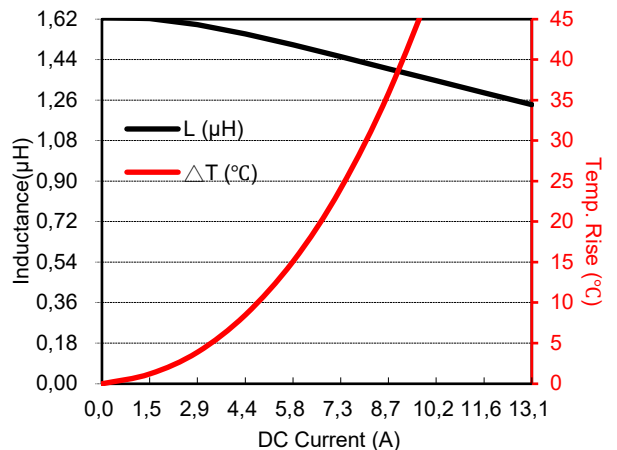
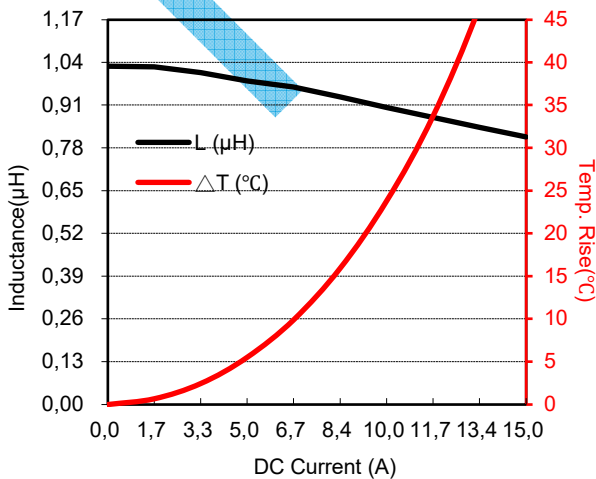
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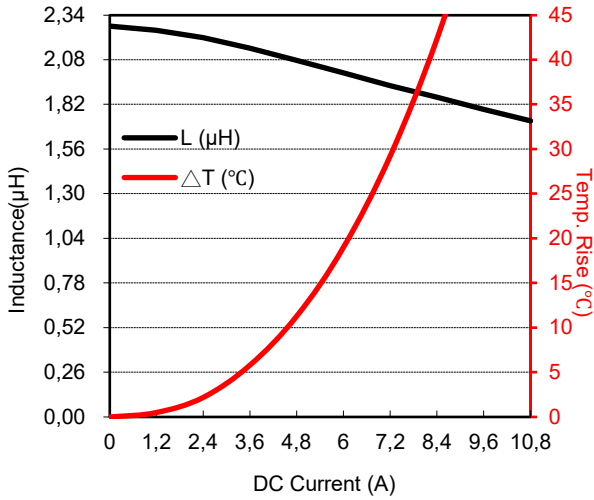
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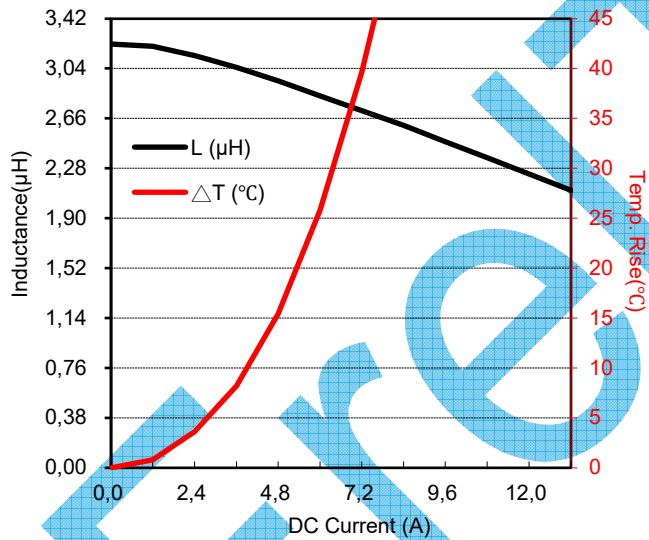
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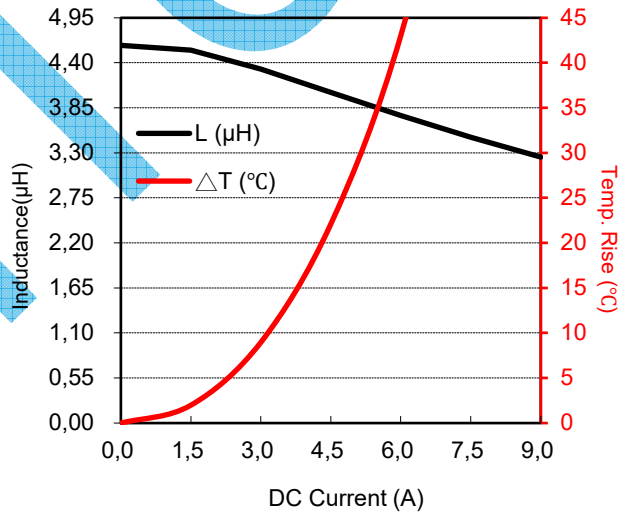
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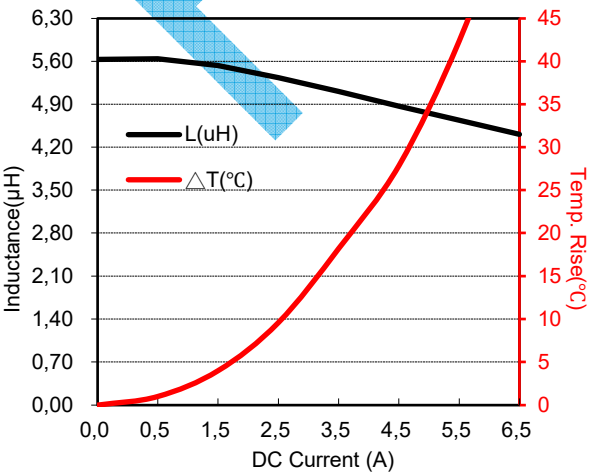
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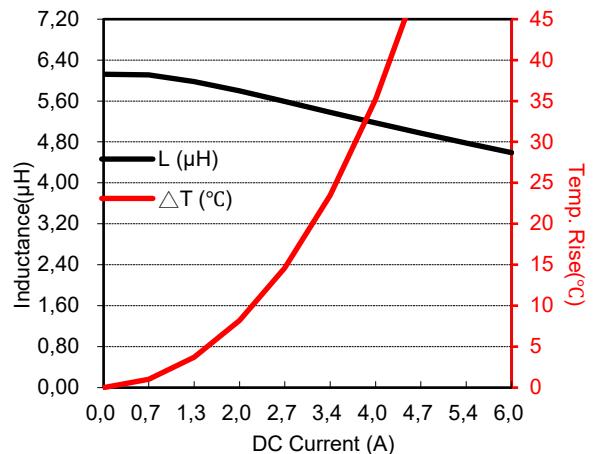
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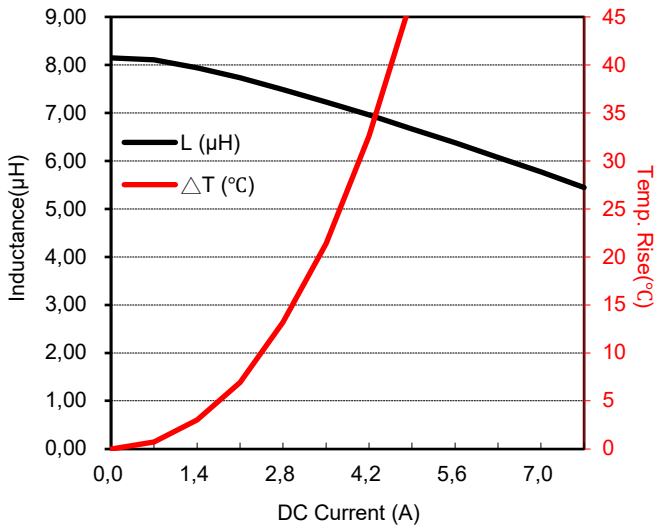


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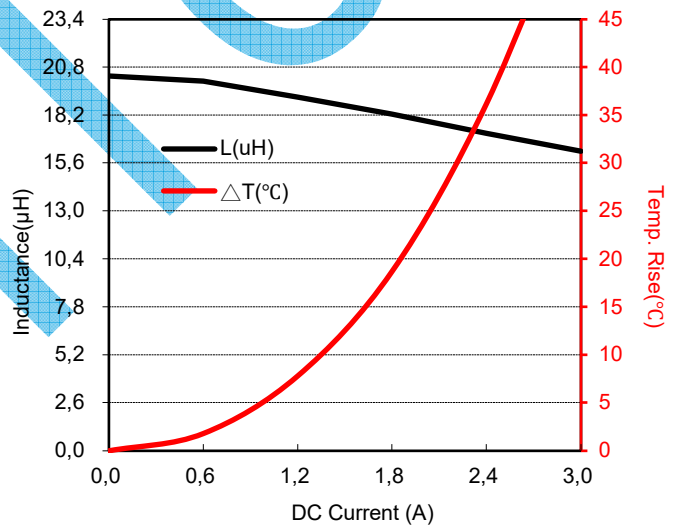


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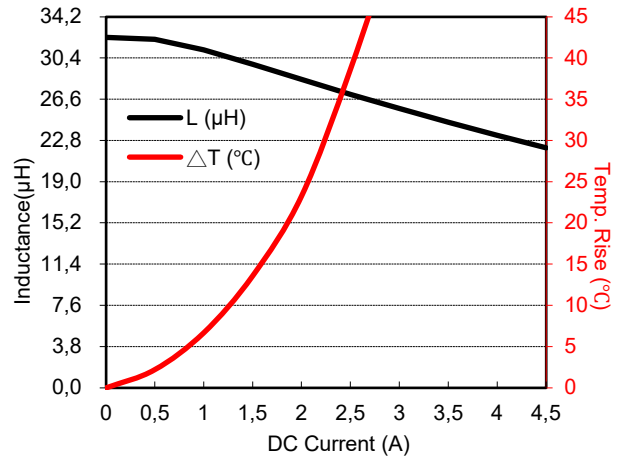
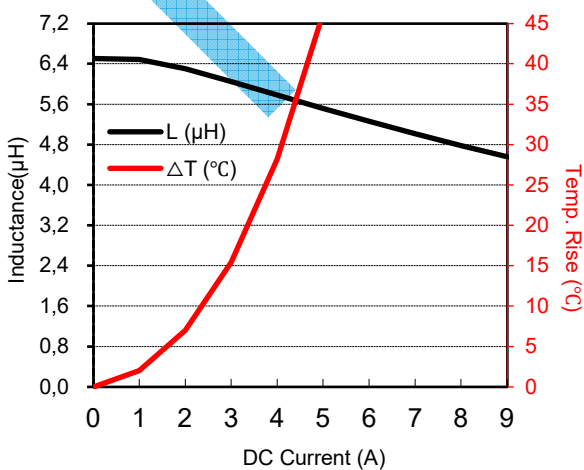
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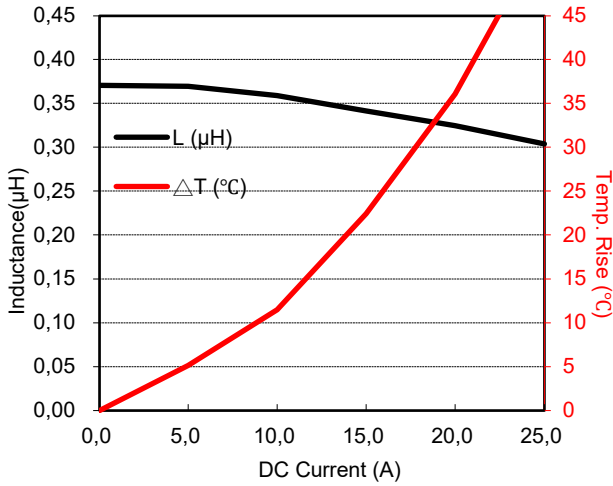
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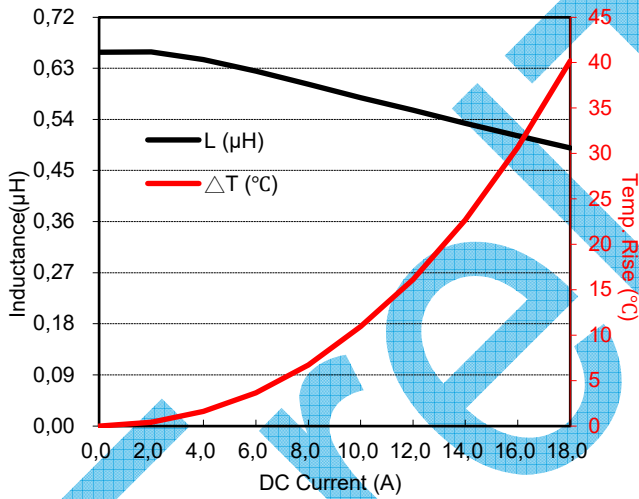
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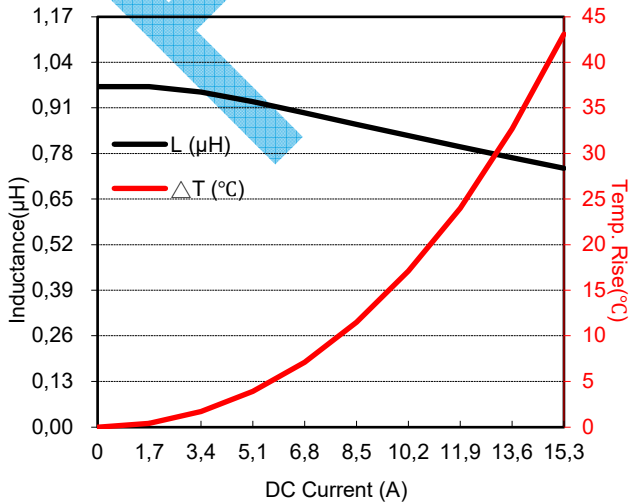
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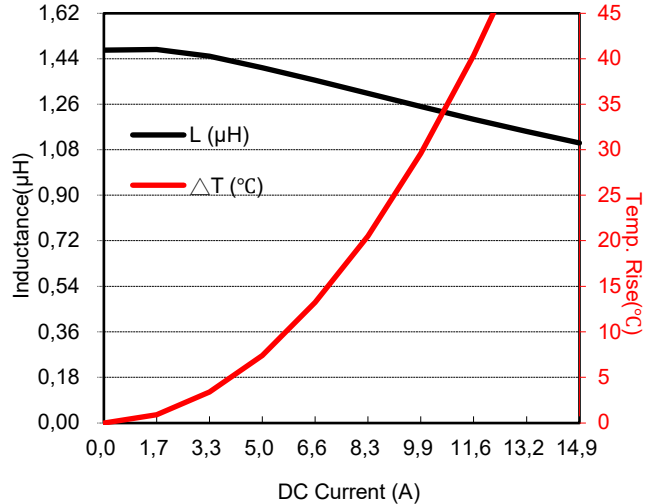


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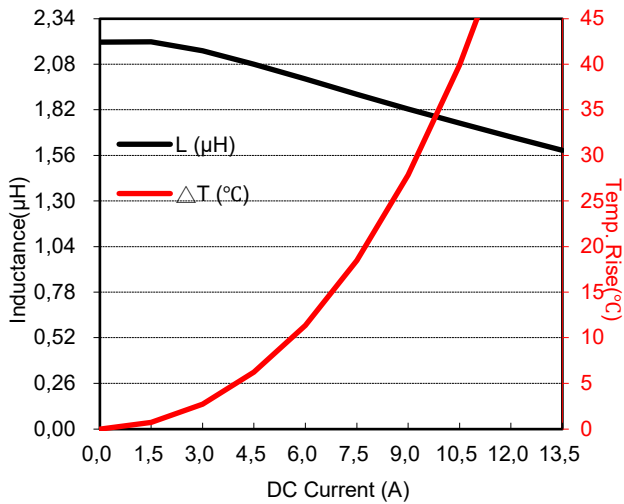


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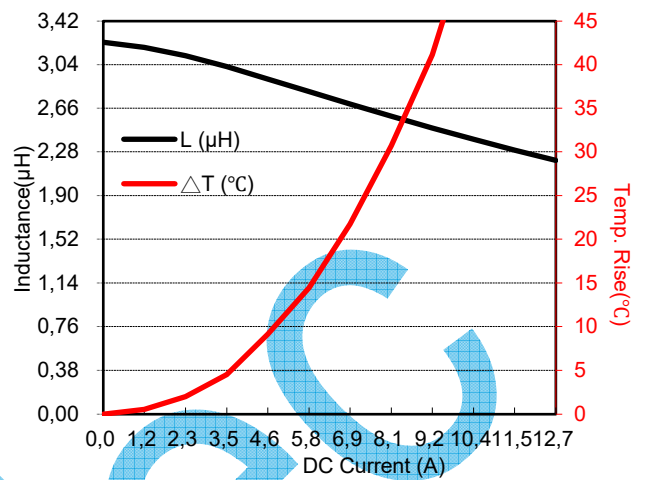
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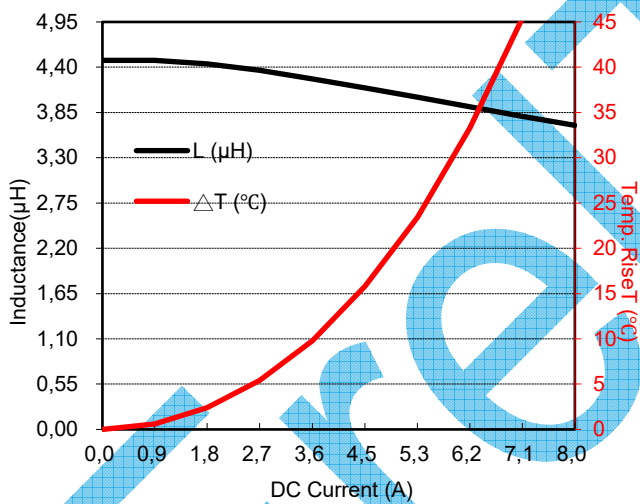


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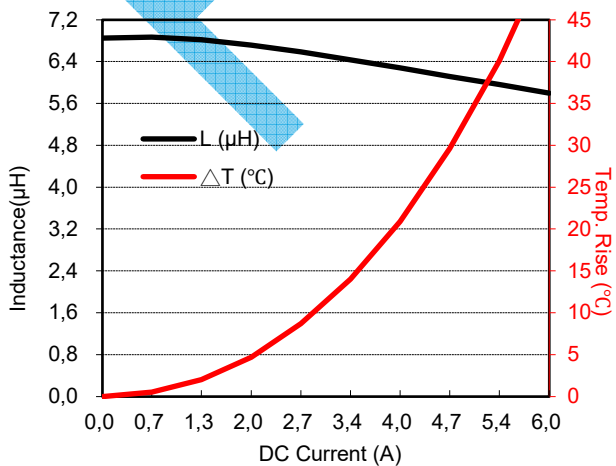
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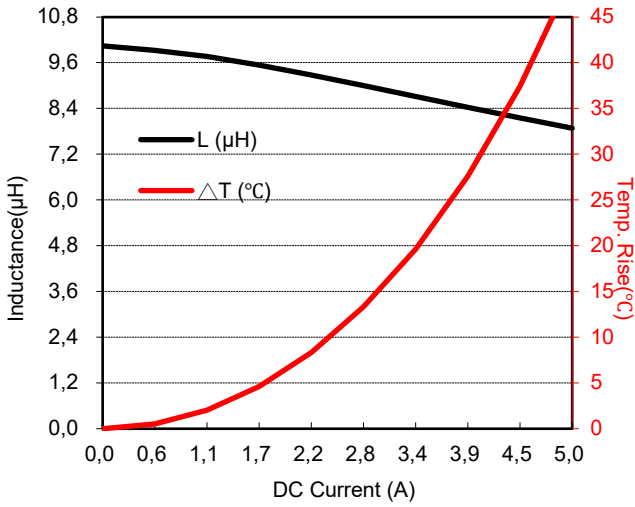
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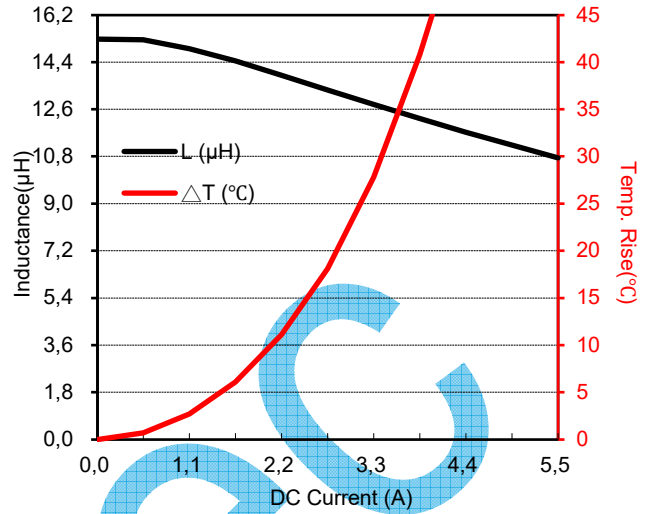
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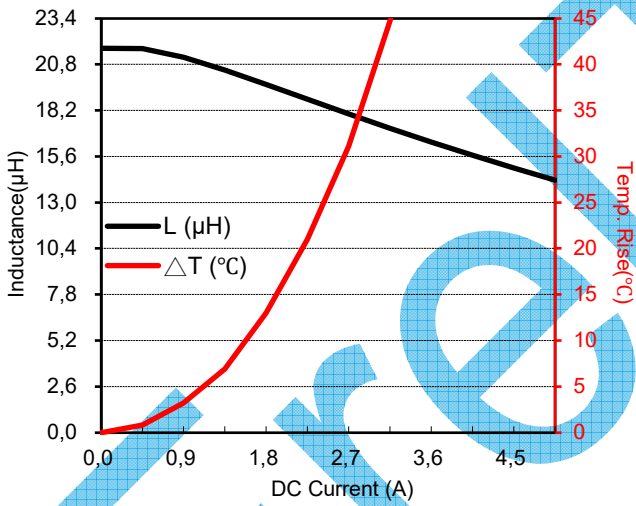


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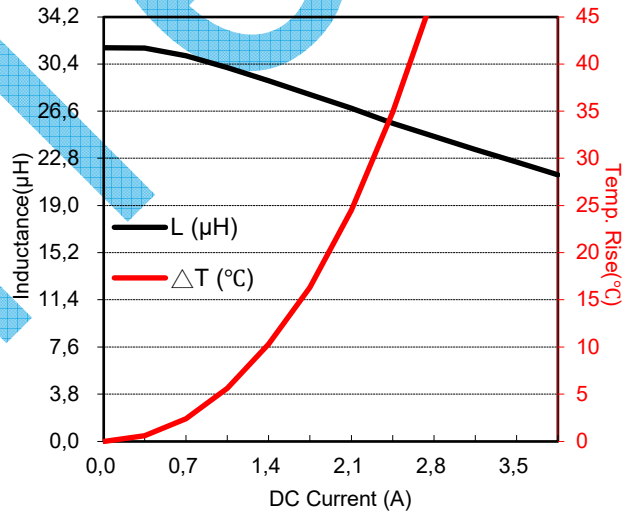
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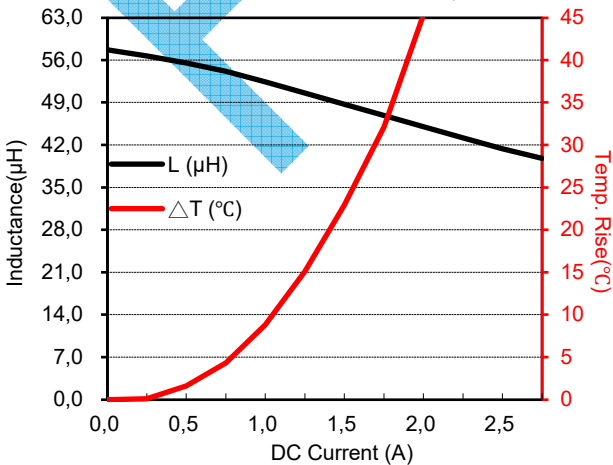
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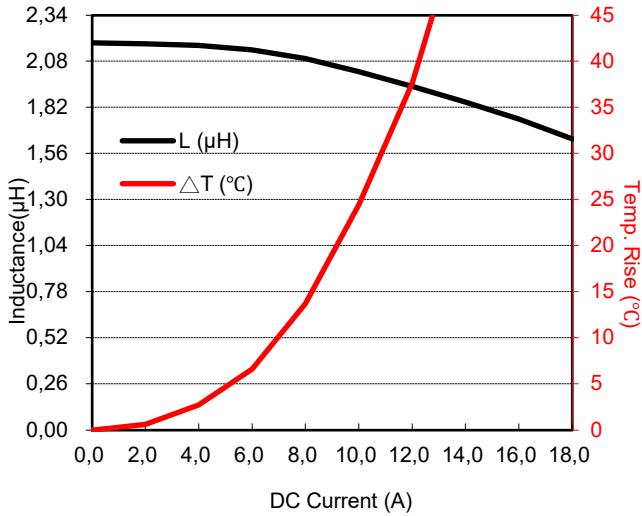


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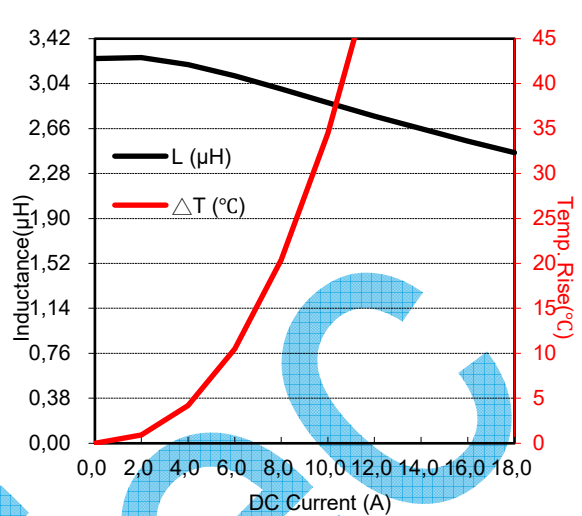
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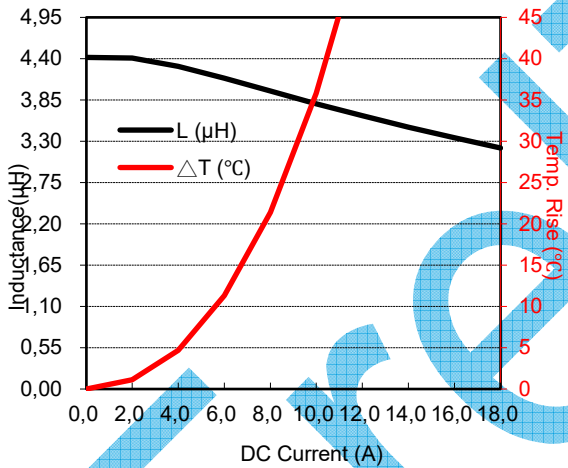


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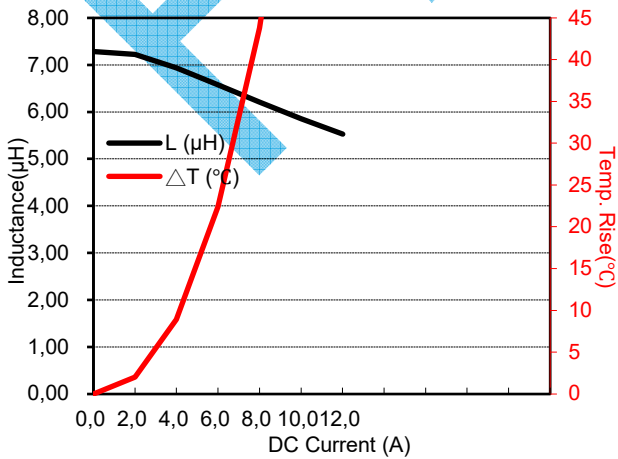


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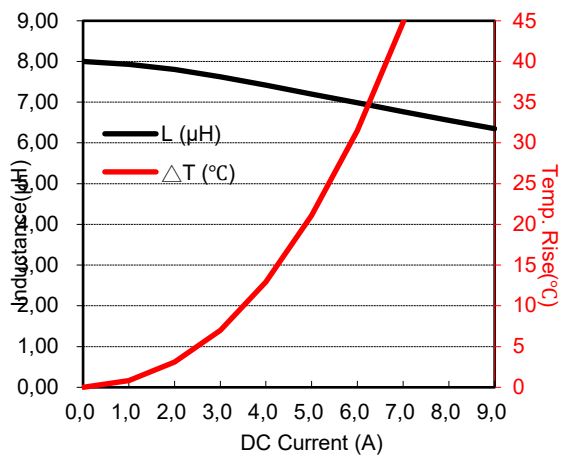


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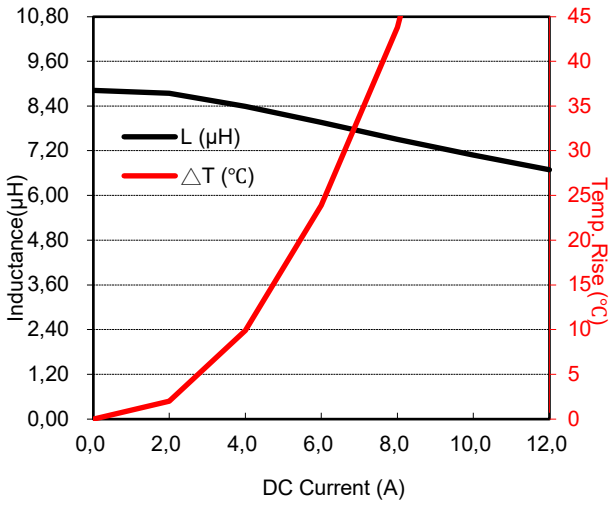


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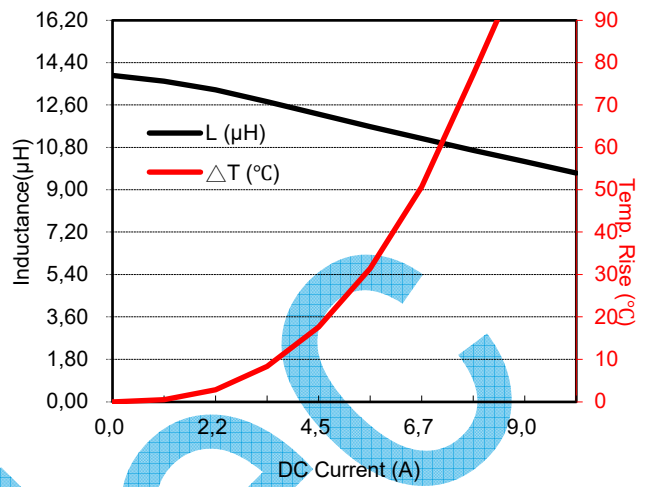
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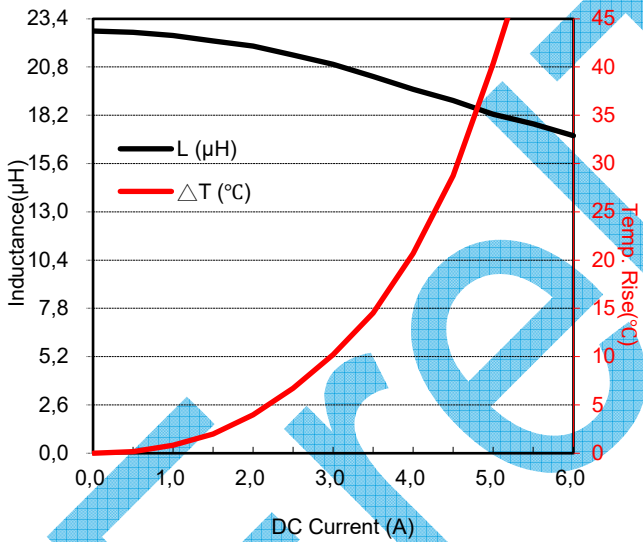


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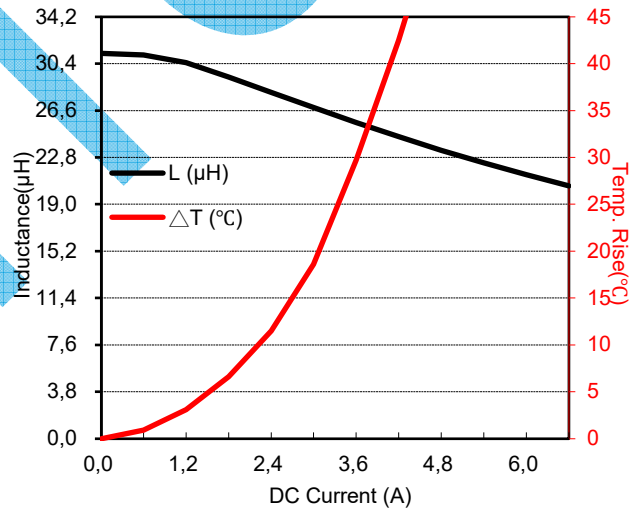
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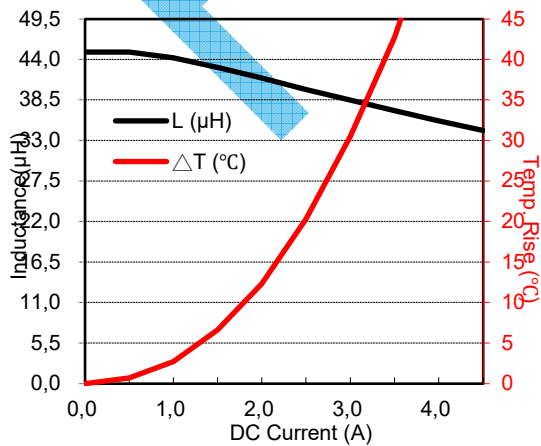
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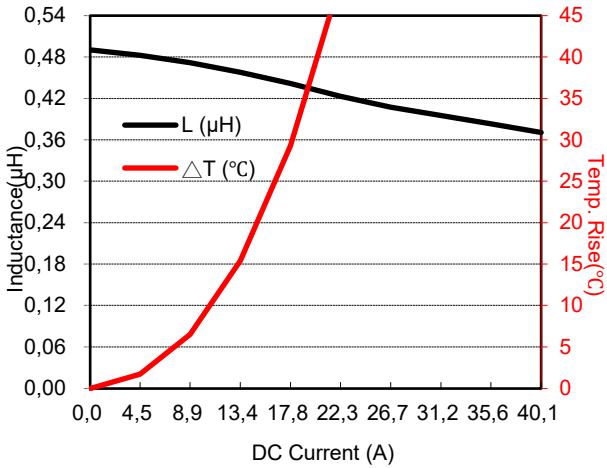
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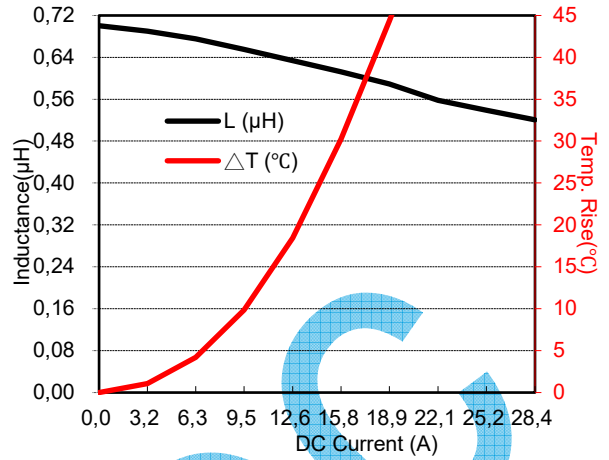
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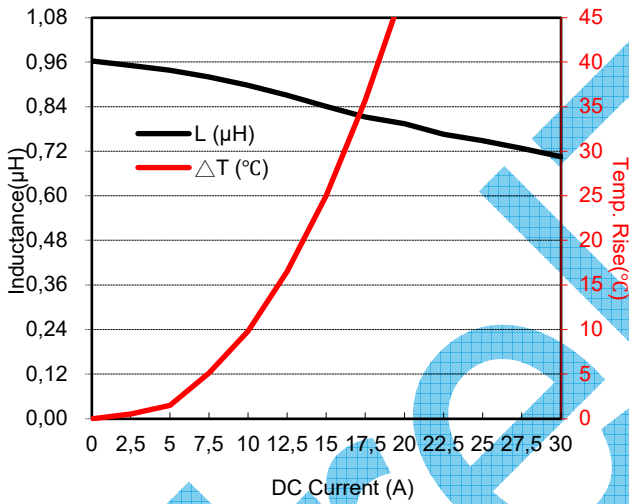


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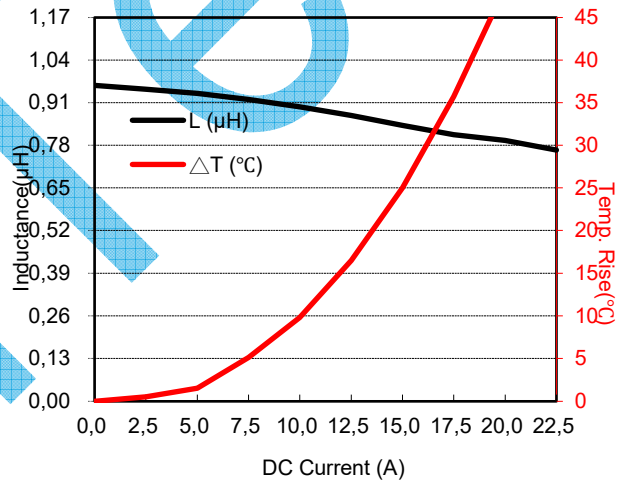
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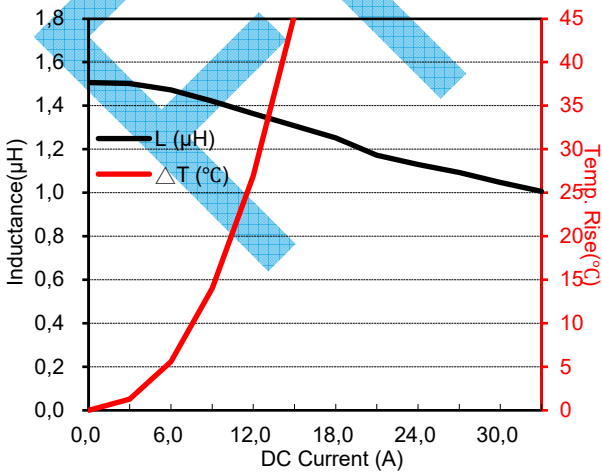
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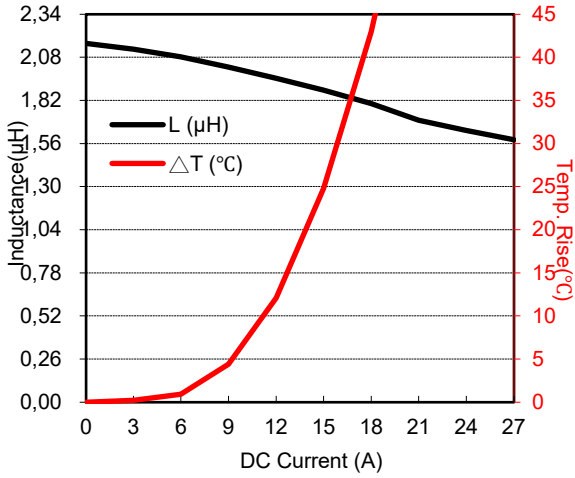


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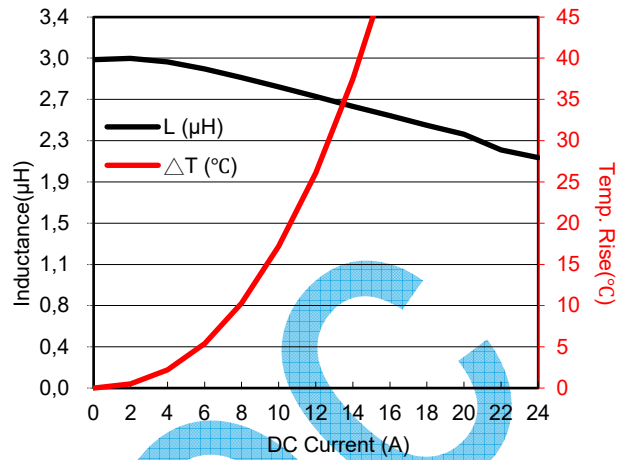
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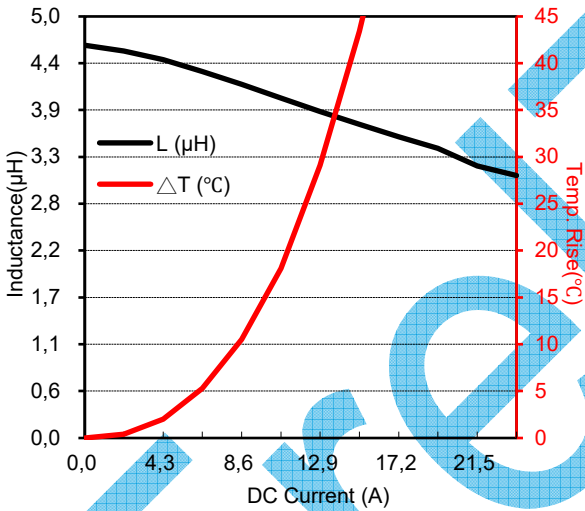


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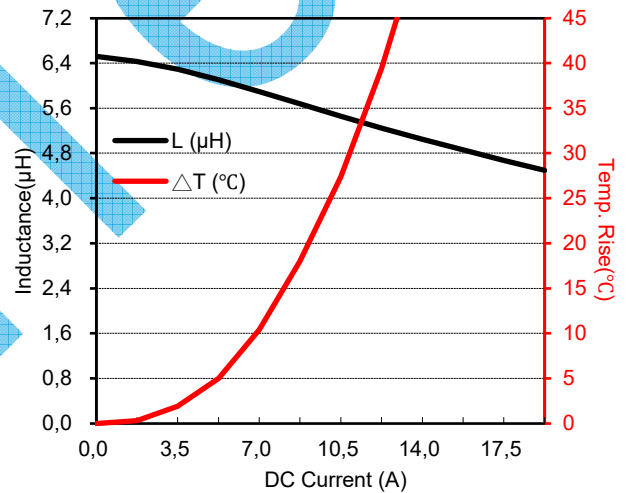
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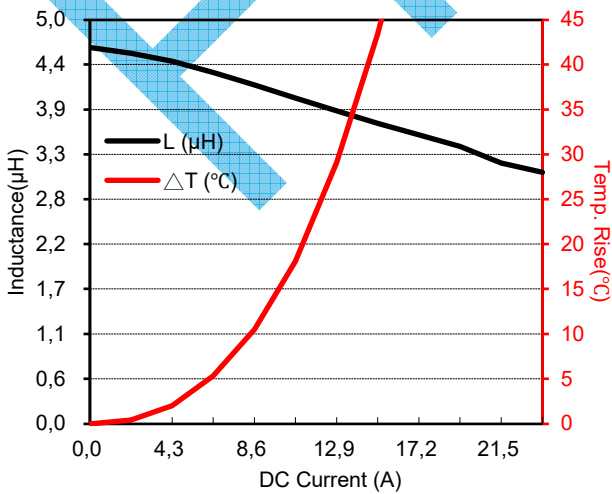
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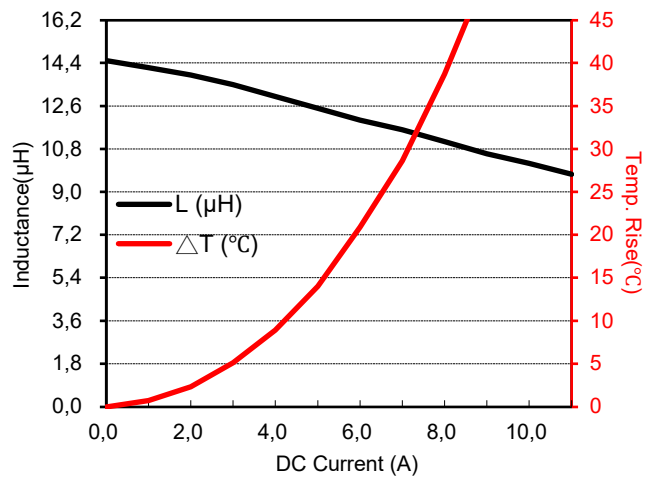
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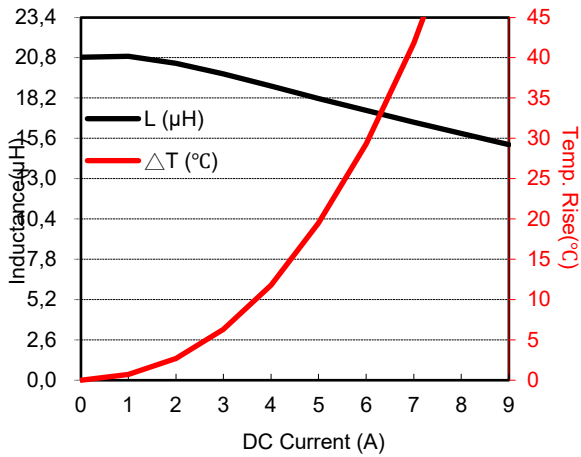


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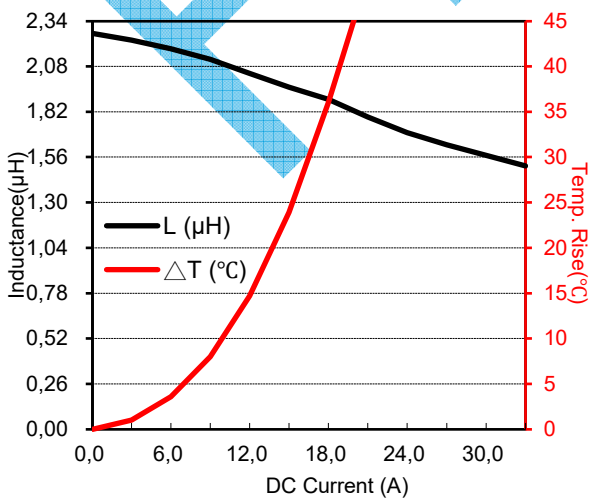


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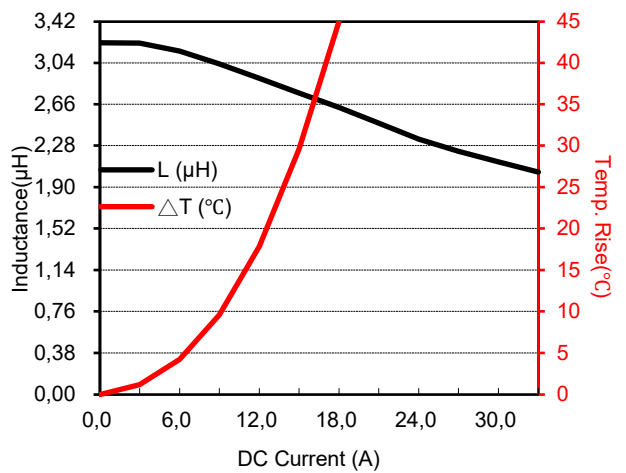
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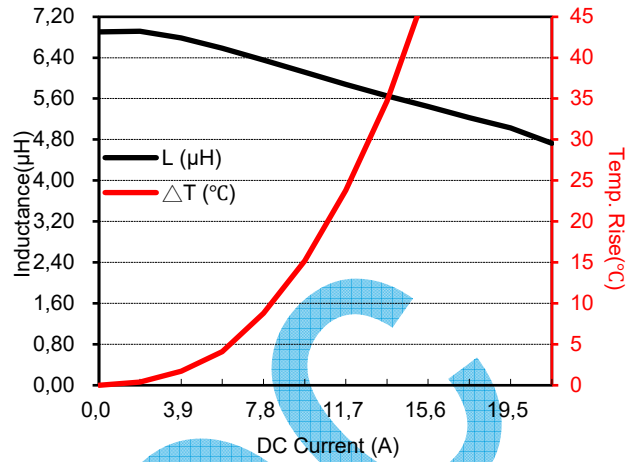
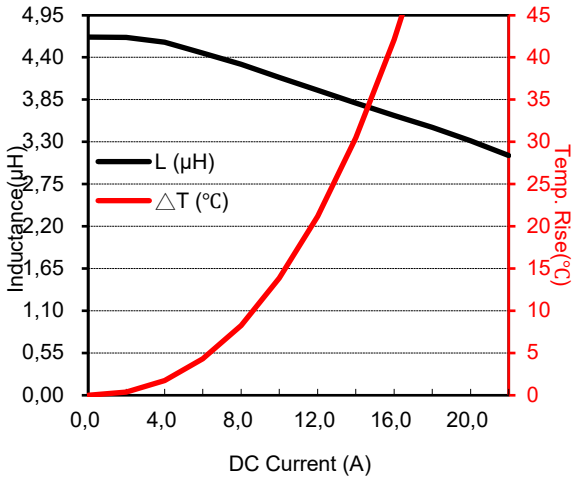


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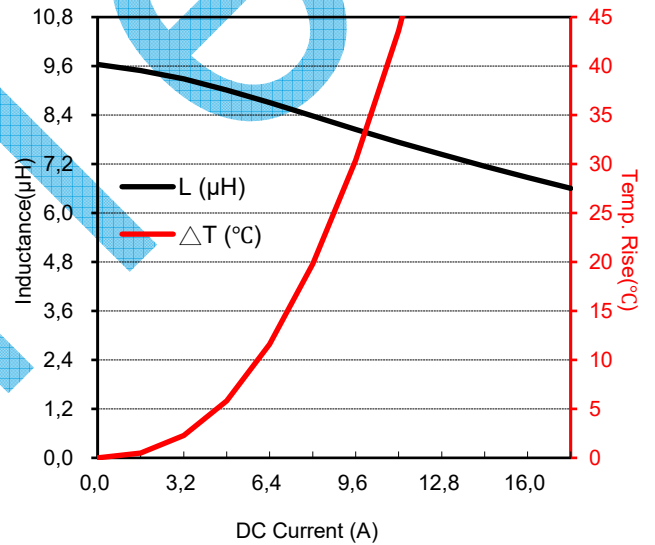
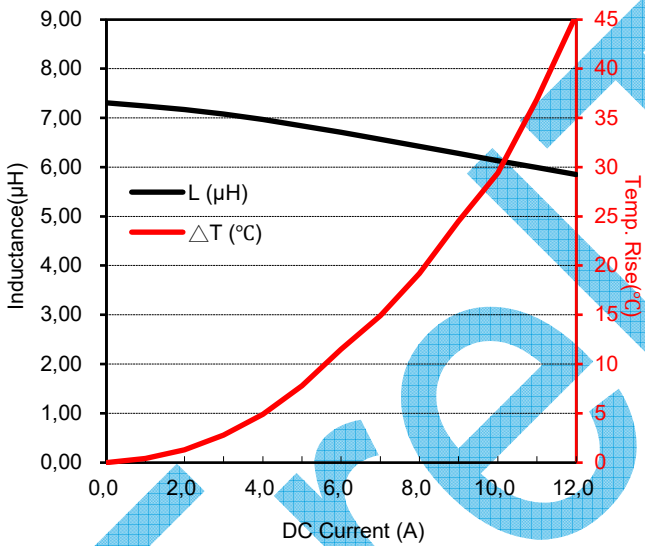
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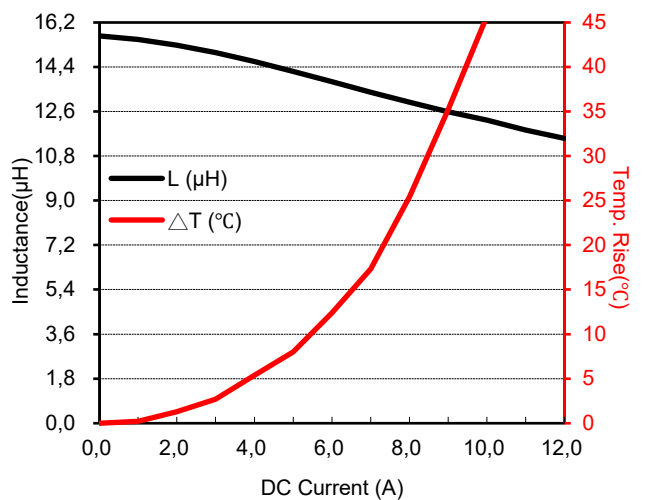
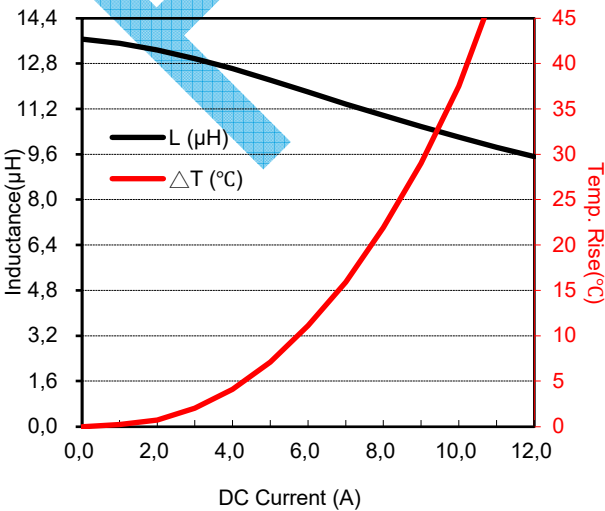
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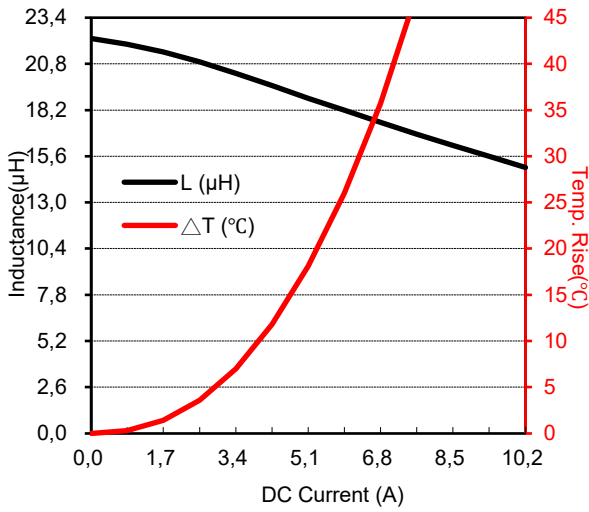
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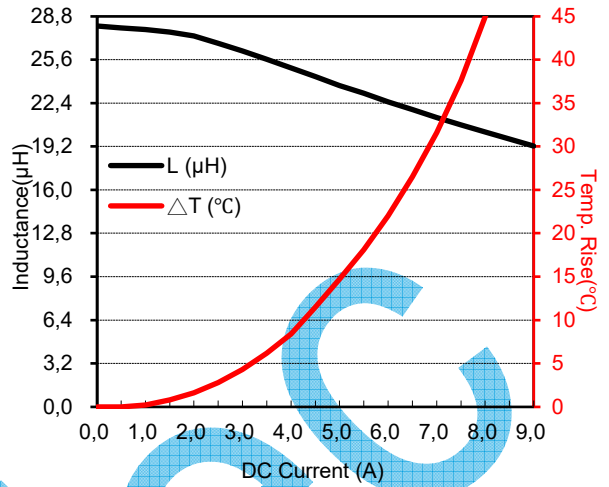
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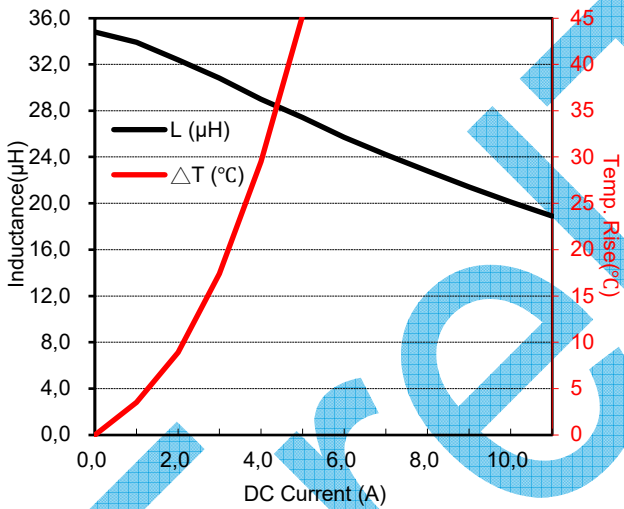


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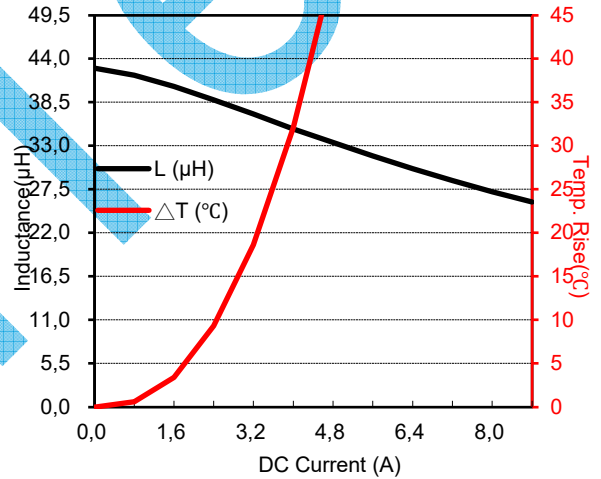
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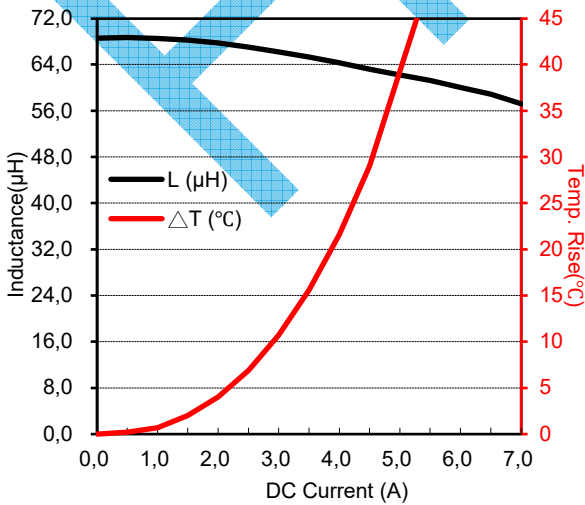
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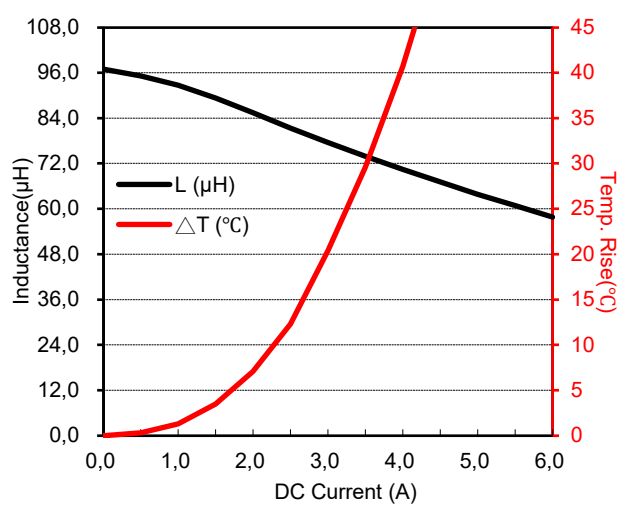
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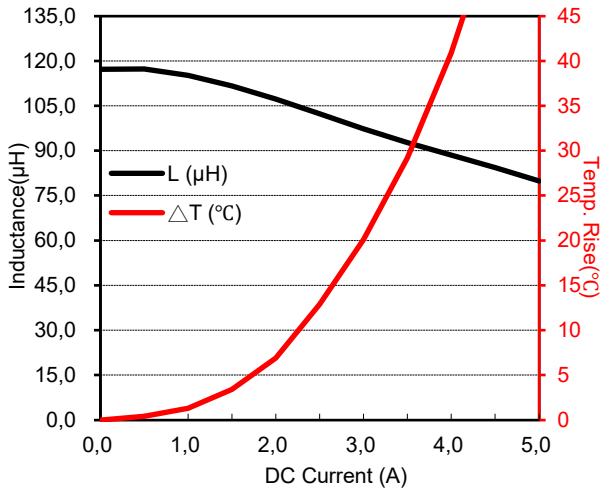


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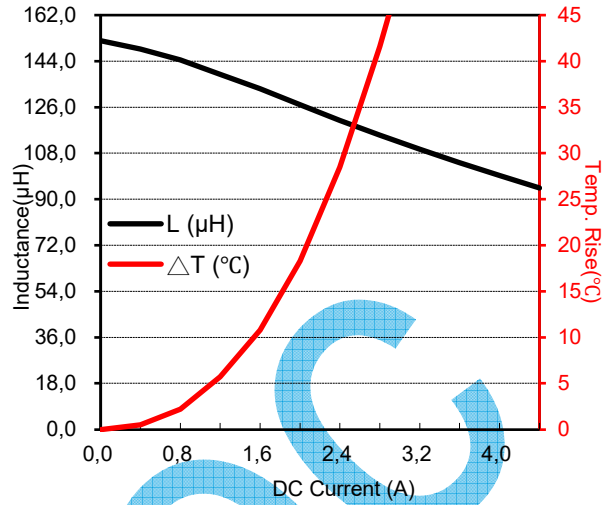
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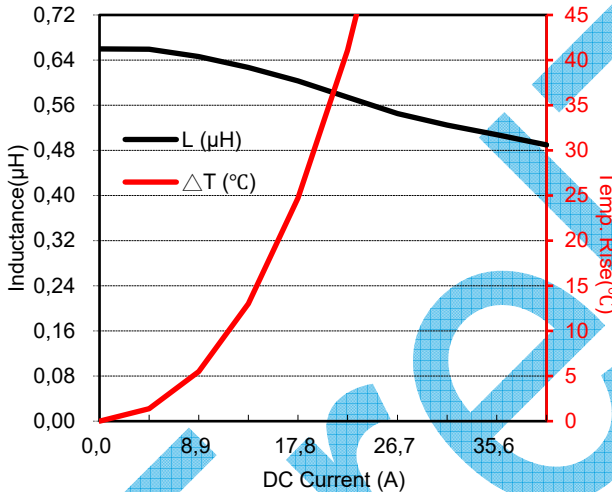


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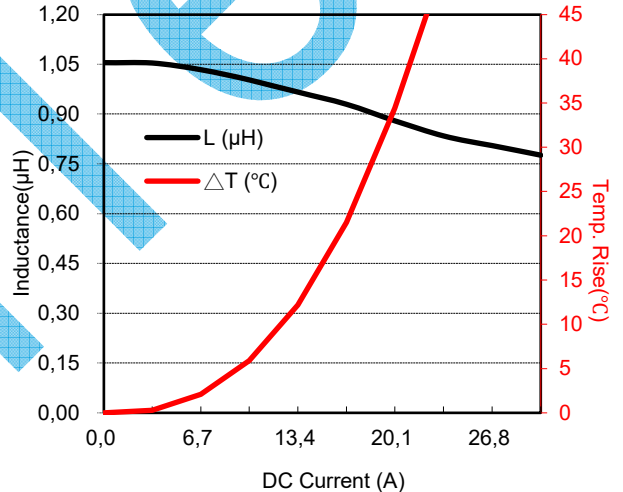
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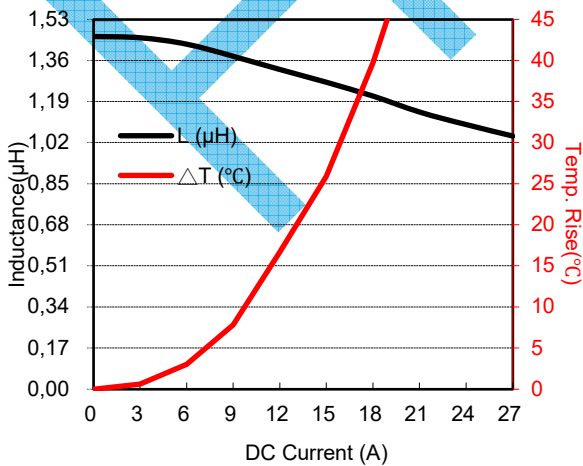
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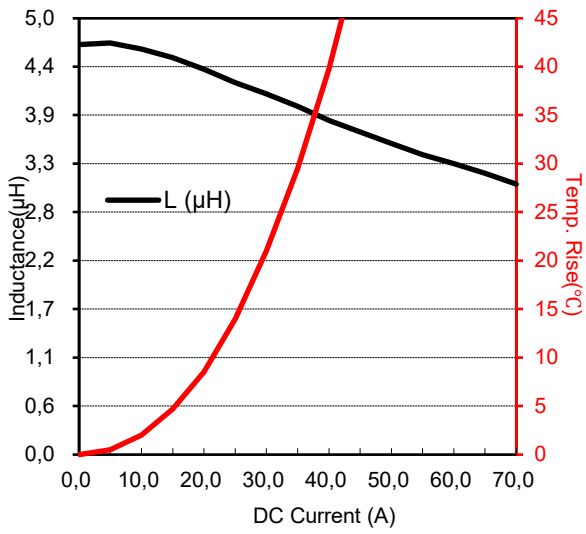


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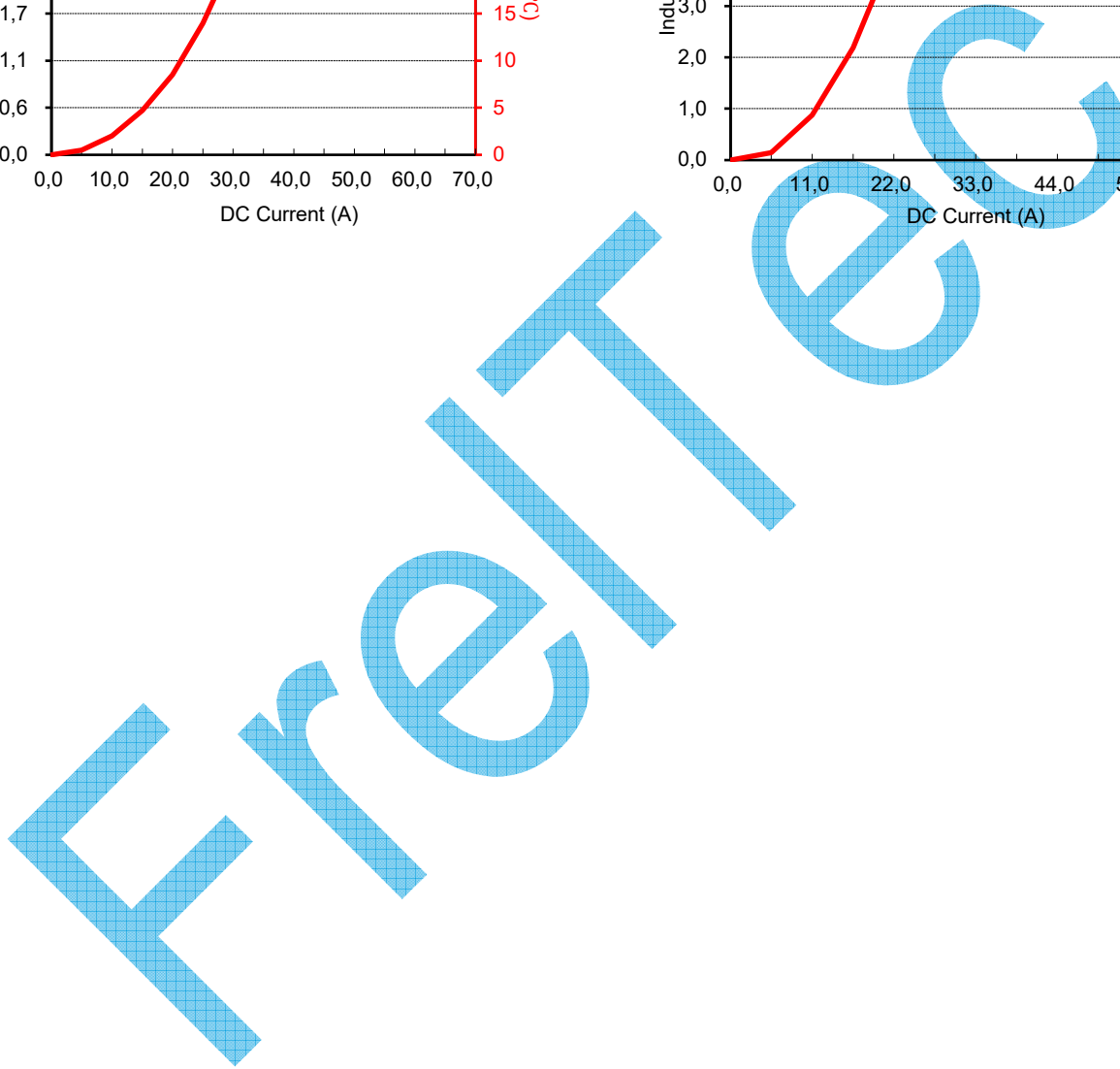
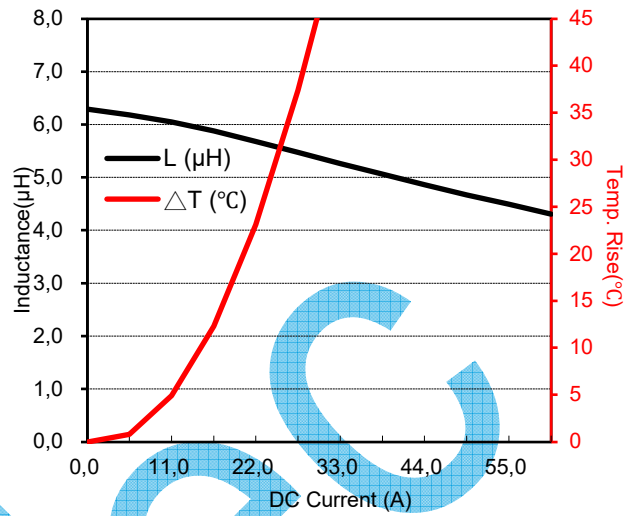
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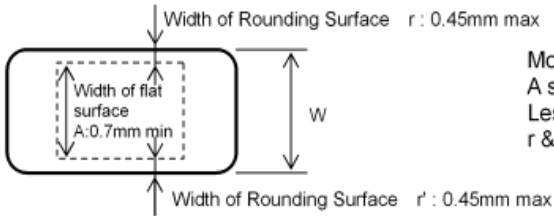
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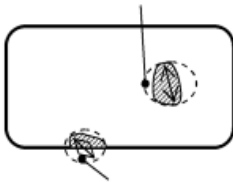
Appearance definition
(only valid for 2016 and 2520)

Appearance Criteria for Chip-off Mode



More than 0.7mm width of flat surface
A shall be acceptable.
Less than 0.45mm width of rounding surface
r & r' shall be acceptable.

Max. Trajectory Diameter of Pinhole: 0.5mm max



Less than $\phi 0.5$ mm max. trajectory diameter
of pinhole and / or chip-off of whole surface
shall be acceptable.

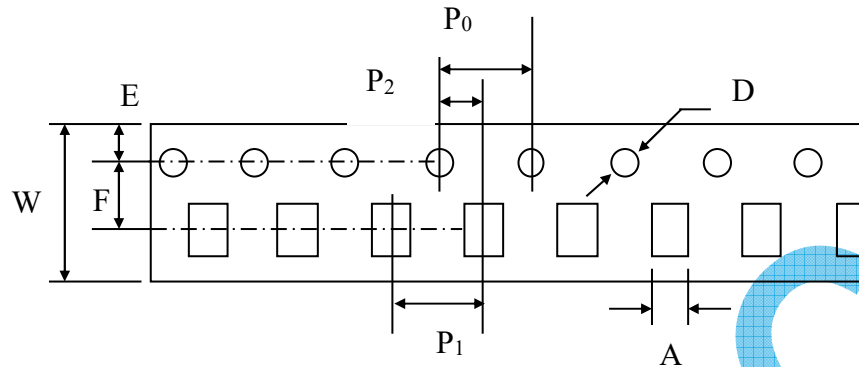
Max. Trajectory Diameter of Chip-off : 0.5mm max



SMD

SPECIFICATION

Tape And Reel Package

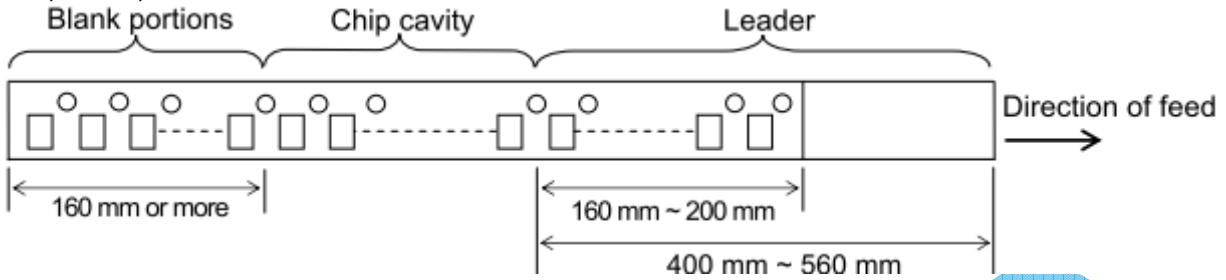


Size	W	P ₁	F	A	E	P ₂	P ₀	D
1502012__KME038	8,0 ± 0,3	4,0 ± 0,1	3,5 ± 0,1					
1502016__HME03A	8,0 ± 0,3	4,0 ± 0,1	3,5 ± 0,1					
1502016__TME03A	8,0 ± 0,1	4,0 ± 0,1	3,5 ± 0,05					
1502520__H_E03A	8,0 ± 0,3	4,0 ± 0,1	3,5 ± 0,1					
1502520__HME03C	8,0 ± 0,3	4,0 ± 0,1	3,5 ± 0,1					
1502520__TME03A	8,0 ± 0,3	4,0 ± 0,1	3,5 ± 0,1					
1502520__TME03C	8,0 ± 0,3	4,0 ± 0,1	3,5 ± 0,1					
1504141__KML03A	12,0 ± 0,3	8,0 ± 0,1	5,5 ± 0,1					
1504742__SML03C	12,0 ± 0,3	8,0 ± 0,1	5,5 ± 0,1	4 ± 0,1				
1504742__SML03E	12,0 ± 0,3	8,0 ± 0,1	5,5 ± 0,1	4 ± 0,1				
1504742__SML02H	12,0 ± 0,3	8,0 ± 0,1	5,5 ± 0,1	4 ± 0,1				
1505752__SML03E	12,0 ± 0,3	8,0 ± 0,1	5,5 ± 0,1	4 ± 0,1				
1505752__SML03H	12,0 ± 0,3	8,0 ± 0,1	5,5 ± 0,1	4 ± 0,1	1,75 ± 0,2	2,0 ± 0,1	4 ± 0,1	1,50 +0,1/-0
1505752__SML02L	12,0 ± 0,3	8,0 ± 0,1	5,5 ± 0,1	4 ± 0,1				
1507066__SML02E	16,0 ± 0,3	12,0 ± 0,1	7,5 ± 0,1	4 ± 0,1				
1507266__SML02G	16,0 ± 0,3	12,0 ± 0,1	7,5 ± 0,1	4 ± 0,1				
1507266__S_LOXI	16,0 ± 0,3	12,0 ± 0,1	7,5 ± 0,1	4 ± 0,1				
1507266__S_LOXL	16,0 ± 0,3	12,0 ± 0,1	7,5 ± 0,1	4 ± 0,1				
1507266__SML01N	16,0 ± 0,3	12,0 ± 0,1	7,5 ± 0,1	4 ± 0,1				
1507266__SML01Q	16,0 ± 0,3	12,0 ± 0,1	7,5 ± 0,1	4 ± 0,1				
1501110__SML0QN	24,0 ± 0,3	16,0 ± 0,1	11,5 ± 0,1	4 ± 0,1				
1501110__TML0QN	24,0 ± 0,3	16,0 ± 0,1	11,5 ± 0,1					
1501413__SML0AQ	24,0 ± 0,3	20,0 ± 0,1	11,5 ± 0,1	4 ± 0,1				
1501413__SML0AR	24,0 ± 0,3	20,0 ± 0,1	11,5 ± 0,1	4 ± 0,1				
1501413__TML0AQ	24,0 ± 0,3	20,0 ± 0,1	11,5 ± 0,1					
1502222__SML0FX	44,0 ± 0,3	32,0 ± 0,1	20,2 ± 0,15					

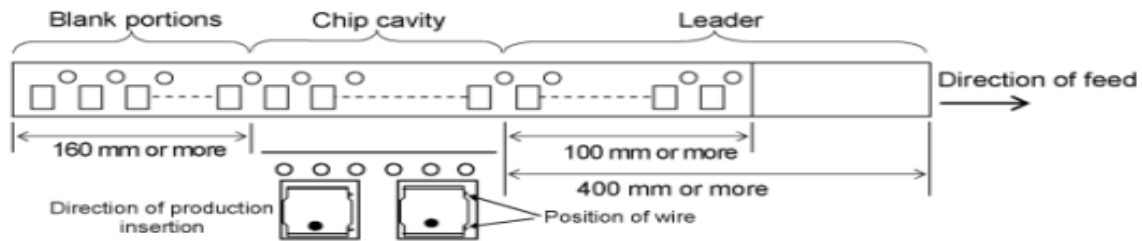
SMD

Lead Dimensions:

2012, 2016, 2520:



Other:

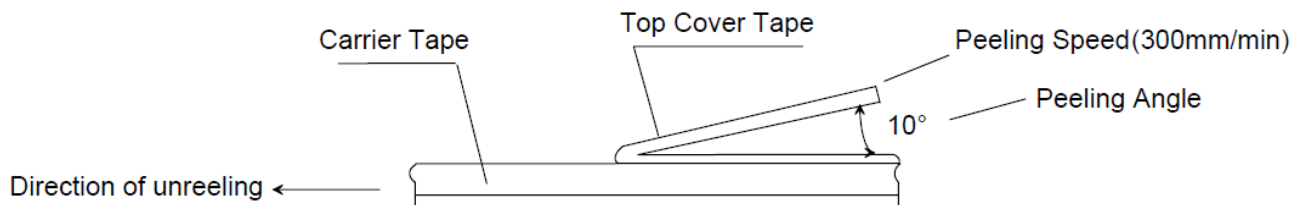


Cover Tape Peel off Strength:

Specifications: 0,1N~1,3 N

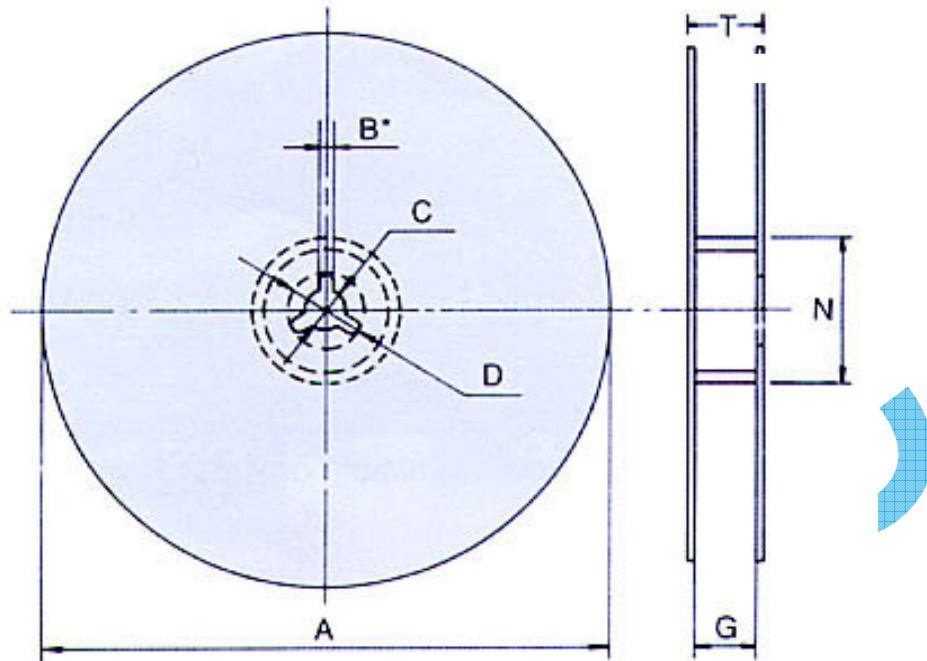
Size: 2012 and 4141 0,1~0,7N

Angle of between 165 and 180 degrees with the top of the carries tape. The cover tape, shall be pulled with a velocity of 300 mm minute.



SMD

Reel:



Symbol	Reel Type / Tape	A	N	C	D	B	G	T
Dimension	1502012 KME038	330±1,5	100±1,5	13,0±0,5	21,0±0,8	55	8,4 ^{+0,2} _{-0,1}	12,4±2,0
	1502016 HME03A							
	1502016 TME03A						12,4 ^{+0,2} _{-0,1}	17,0±2,0
	1502520 H E03A							
	1502520 HME03C						16,4 ^{+0,2} _{-0,1}	21,0±2,0
	1502520 TME03A							
	1502520 TME03C						24,4 ^{+0,2} _{-0,1}	28,4±2,0
	1504141 KML03A							
	1504742 SML0ZC						45,2 ^{+0,2} _{-0,1}	49,2±2,0
	1504742 SML0ZE							
	1504742 SML0ZH							
	1505752 SML03E							
	1505752 SML03H							
	1505752 SML02L							
	1507066 SML02E							
	1507266 SML02G							
	1507266 S LOXI							
	1507266 S LOXL							
	1507266 SML01N							
	1507266 SML01Q							
	1501110 SML0QN							
	1501110 TML0QN							
1501413 SML0AQ								
1501413 SML0AR								
1501413 TML0AQ								
1502222 SML0FX								

in mm

SMD

Stock period

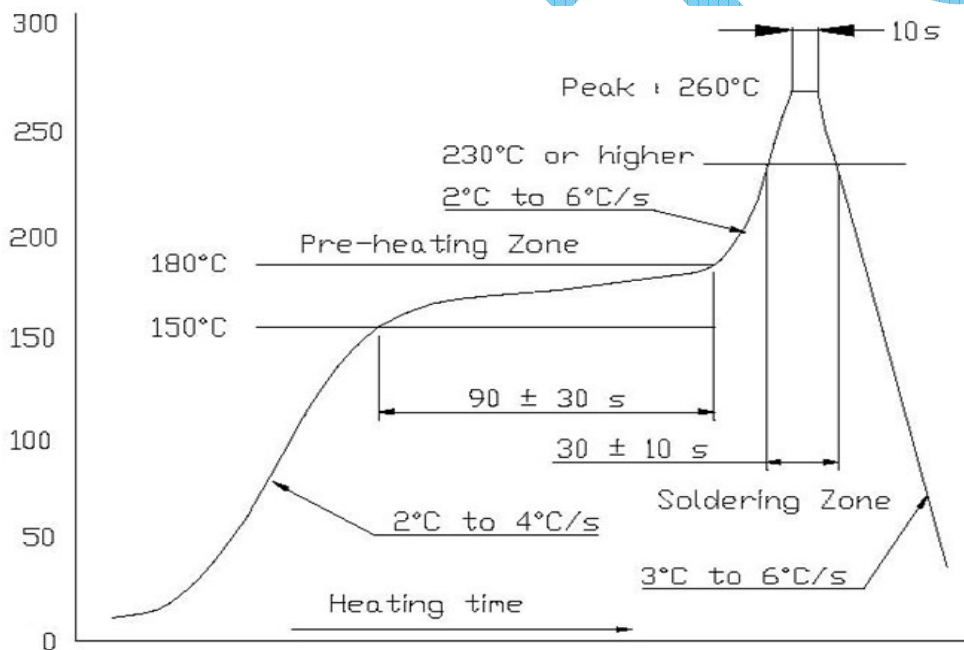
The performance of these products, including the solderability, is guaranteed for 12 months after production date code, provided that they remain packed as they were when delivered and stored at a temperature of 25°C to 35°C and a relative humidity less than 45 to 70%RH

Handling:

Keep the products away from all magnets and magnetic objects.
Be careful not to subject the products to excessive mechanical shocks.
Please avoid applying impact to the products after mounted on pc board.
Avoid ultrasonic cleaning

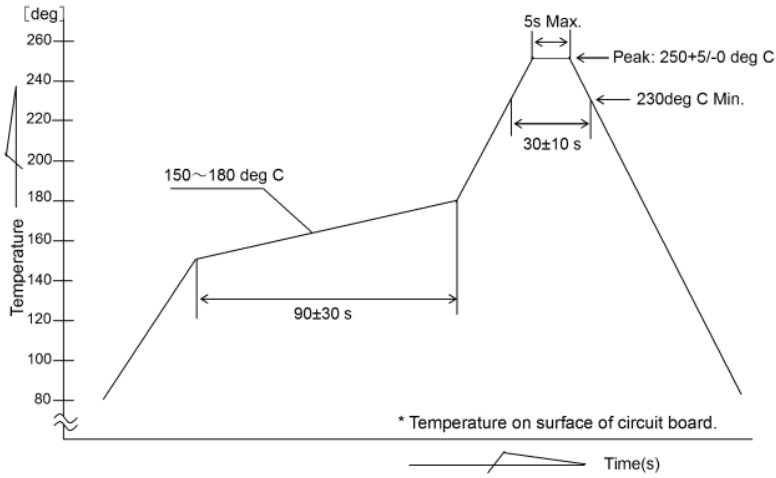
Cleaning Process Note

If this power choke is dipped in the cleaning agent, such as toluene, xylene, ketone, and ether system, there is a possibility that the performance decreases greatly.
The high power ultrasonic washing may damage the choke body.
Please contact us if you need the cleaning via the above agents or ultrasonic washing.

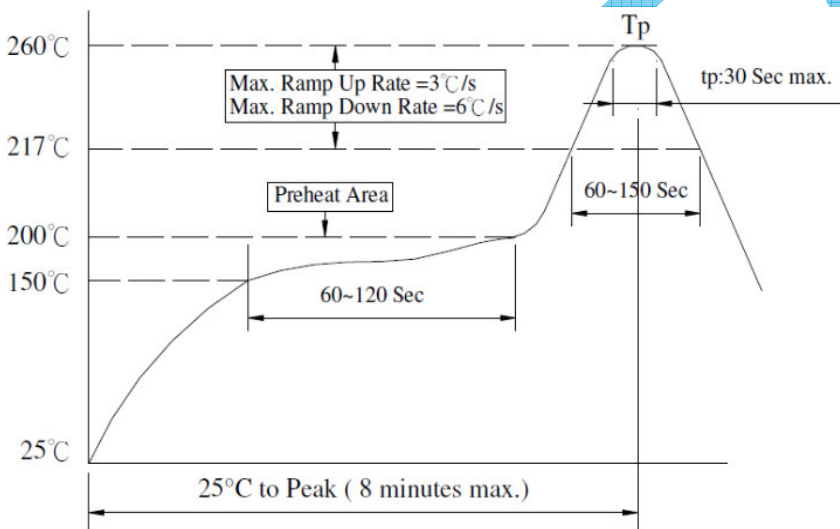
Reflow Soldering Profile

SMD

And 1502016 and 1502520



Only 1502012 and 1504141



Mechanical

Item	Specification & Requirement	Test Method
Solder ability	The surface of terminal immersed shall be minimum of 90% covered with a new coating of solder	Solder heat proof: 1. Preheating: 160±10°C 90s 2. Retention time: 245±5°C for 3 ± 1 sec (4141 and 2012 for 2 ± 0,5 sec)
Vibration	No mechanical damage. Inductance change within±10%.	1. Frequency: 10Hz to 55Hz to 10Hz in 60 sec as a period 2. Vibration time: period cycled for 2 hours in each of 3 mutual perpendicular directions 3. Amplitude: 1,5mm max.
Terminal strength	No detachment of terminal pin and no breakage of wire	Add static load 4,9N (500gf) to inductor through hole of test board for 10 ± 2 sec For 4141 and 2012: <ul style="list-style-type: none"> • Peak value : 100G • Duration of pulse: 11ms • 3 times in each positive and negative direction of 3 mutual perpendicular directions

Endurance

Item	Specification & Requirement	Test Method
Thermal Shock	No mechanical damage. Inductance change within±10%.	1. Repeat 100 cycles as follow : -40°C ± 2°C, 30±3 minutes 4141 and 2012: -55°C ± 2°C, 30±3 minutes Room temperature, 5 minutes +125°C ± 2°C, 30±3 minutes Room temperature, 5 minutes 2. Recovery: 48+4/-0 hours of recovery under the standard condition after the test see note
High Temperature resistance	No mechanical damage. Inductance change within±10%.	1. Environment condition : 85°C±2°C Applied Current: Rated current 2. Duration: 500 +4/-0 hours 4141 and 2012: Duration : 1000 +4/-0 hours see note
Humidity resistance	No mechanical damage. Inductance change within±10%.	1. Environment condition : 60°C±2°C Humidity: 90~95% Applied Current: Rated current 2. Duration: 500 +4/-0 hours 4141 and 2012: Duration : 1000 +4/-0 hours see note
Low Temperature Storage	No mechanical damage. Inductance change within±10%.	1. Store temperature: -40°C ± 2°C 4141 and 2012: -55°C ± 2°C 2. Duration: 500 +4/-0 hours 4141 and 2012: Duration : 1000 +4/-0 hours
High Temperature Storage	No mechanical damage. Inductance change within±10%.	1. Store temperature: +125°C ± 2°C 2. Duration: 500 +4/-0 hours 4141 and 2012: Duration : 1000 +4/-0 hours

Note:

When there are questions concerning measurement result: measurement shall be made after 48 ± 2 hours of recovery under the standard condition.

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