

SMT Power Inductor

High Current Molded Power Inductor - PA4342.XXXANLT Series



-  Height: 4.0mm Max
-  Footprint: 11.3mm x 10.3mm Max
-  Current Rating: up to 38.0A
-  Inductance Range: 0.15uH to 100.0uH
-  Shielded construction and compact design
-  High current, low DCR, and high efficiency
-  Minimized acoustic noise and minimized leakage flux

Electrical Specifications @ 25°C - Operating Temperature -55°C to +155°C

Part Number	Inductance ⁵ 100KHz, 1V uH±20%	Rated Current A	DC Resistance		Saturation Current Max. A	Mechanical
			MAX.	TYP.		
			mΩ	mΩ		
PA4342.151ANLT	0.15*	38.0	0.6	0.5	75.0	Footprint 1
PA4342.221ANLT	0.22	33.0	0.83	0.72	60.0	Footprint 1
PA4342.361ANLT	0.36	29.0	1.18	1.05	45.0	Footprint 1
PA4342.471ANLT	0.47	28.0	1.5	1.3	40.0	Footprint 1
PA4342.561ANLT	0.56	23.0	1.8	1.6	29.0	Footprint 1
PA4342.681ANLT	0.68	20.0	2.2	1.9	28.0	Footprint 1
PA4342.901ANLT	0.90	19.0	2.6	2.2	27.0	Footprint 1
PA4342.102ANLT	1.00	18.0	3.25	2.9	26.0	Footprint 1
PA4342.152ANLT	1.50	16.0	4.2	3.7	22.0	Footprint 1
PA4342.222ANLT	2.20	13.0	6.7	5.8	16.0	Footprint 2
PA4342.332ANLT	3.30	10.0	11.8	10.5	14.0	Footprint 2
PA4342.472ANLT	4.70	8.0	19.0	15.8	13.0	Footprint 2
PA4342.562ANLT	5.60	7.2	22.8	19.0	11.5	Footprint 2
PA4342.682ANLT	6.80	6.8	24.5	22.0	11.0	Footprint 2
PA4342.822ANLT	8.20	6.5	28.0	25.0	8.5	Footprint 2
PA4342.103ANLT	10.0	6.1	30.0	27.0	7.5	Footprint 2
PA4342.153ANLT	15.0	5.0	45.0	41.0	6.0	Footprint 2
PA4342.223ANLT	22.0	4.1	66.0	58.0	5.5	Footprint 2
PA4342.333ANLT	33.0	3.5	91.0	84.0	5.0	Footprint 2
PA4342.473ANLT	47.0	3.0	143.0	125.0	3.7	Footprint 2
PA4342.683ANLT	68.0	2.4	210.0	184.0	3.0	Footprint 2

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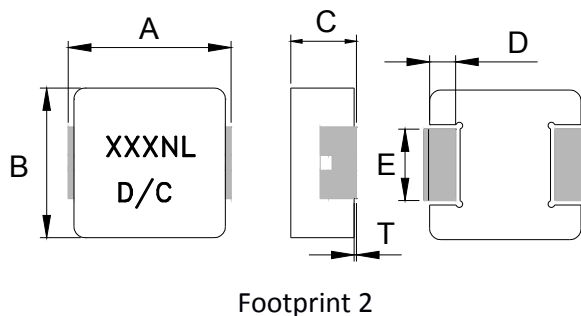
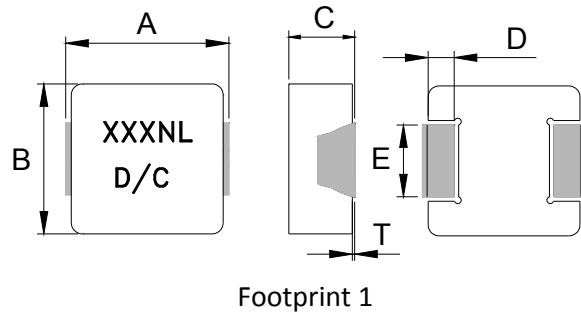
Part Number	Inductance 100KHz, 1V uH±20%	Rated Current A	DC Resistance		Saturation Current Max. A	Mechanical
			MAX.	TYP.		
			mΩ	mΩ		
PA4342.823ANLT	82.0	2.1	270.0	240.0	2.8	Footprint 2
PA4342.104ANLT	100	1.8	310.0	270.0	2.4	Footprint 2

Notes:

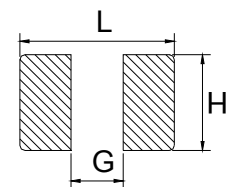
1. Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
2. The saturation current is the current at which the initial inductance drops approximately 30% at the stated ambient temperature. This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effect) to the component.
3. The rated current is the DC current required to raise the component temperature by approximately 40°C. Take note that the components' performance varies depending on the system condition. It is suggested that the component be tested at the system level, to verify the temperature rise of the component during system operation.
4. The part temperature (ambient+temp rise) should not exceed 155°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 is ±20% for all parts except PA4342.151ANLT(±30%) .

Mechanical

PA4342.XXXANLT



FINAL LAYOUT



SUGGESTED PAD LAYOUT

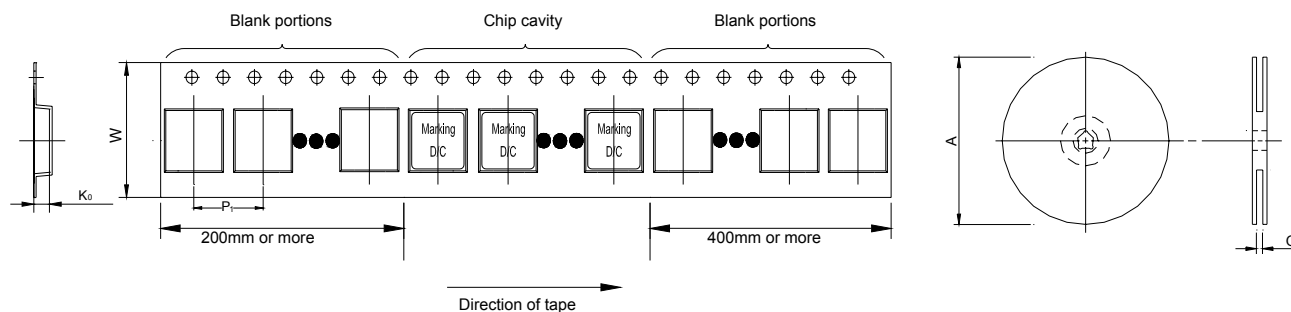
Series	Mechanical	A	B	C	D	E	T	L	G	H
PA4342.XXXANLT	Footprint 1	11.0±0.3	10.0±0.3	3.8±0.2	2.0±0.3	2.5±0.3	(0-0.2)	12.5	(5.4)	(3.5)
PA4342.XXXANLT	Footprint 2	11.0±0.3	10.0±0.3	3.8±0.2	2.0±0.3	3.0±0.3	(0-0.2)	12.5	(5.4)	(3.5)

All Dimensions in mm.

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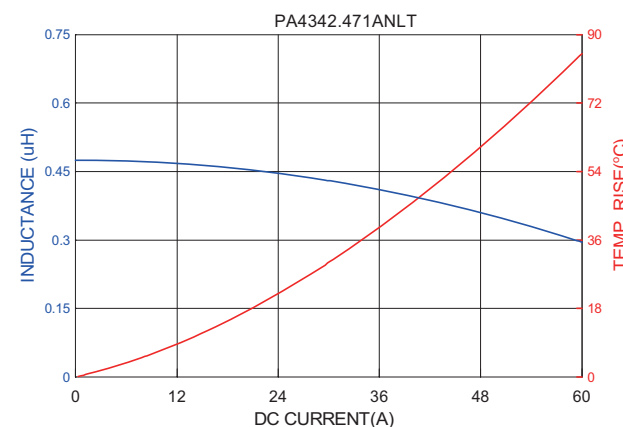
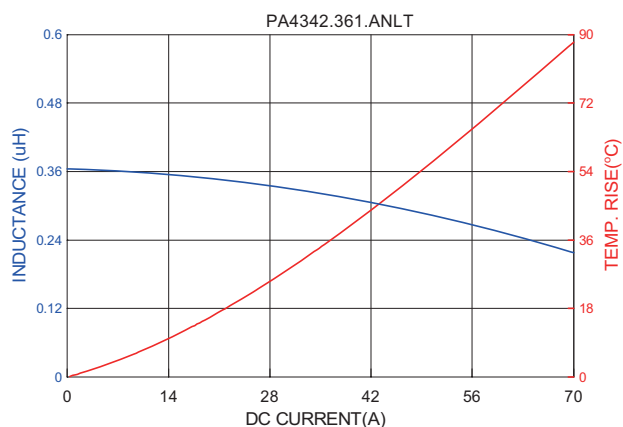
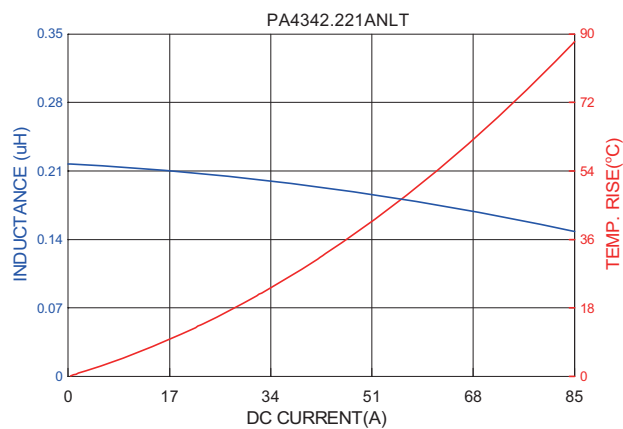
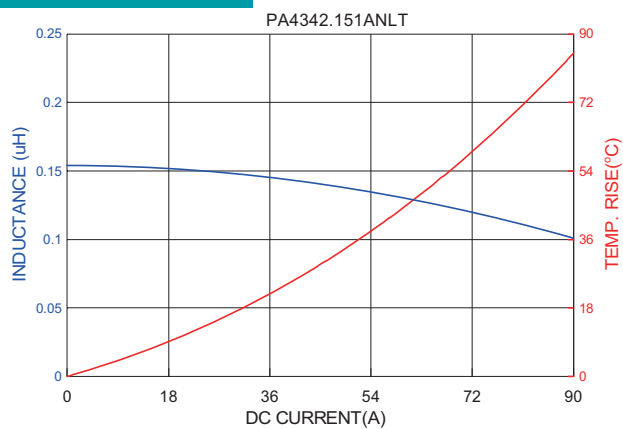
TAPE & REEL INFO



SURFACE MOUNTING TYPE, REEL/TAPE LIST

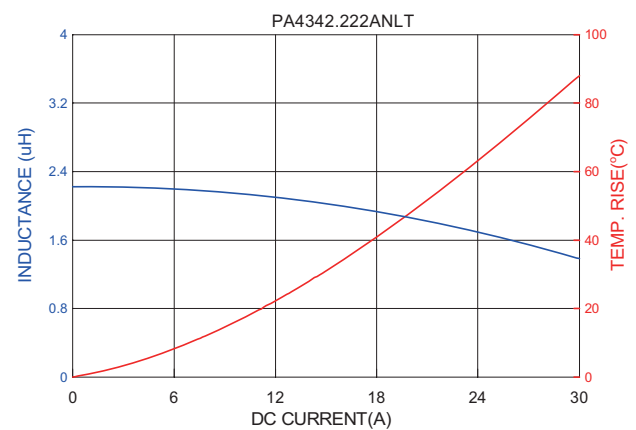
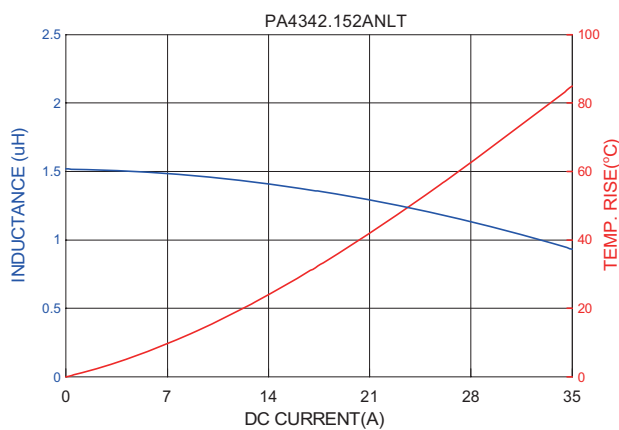
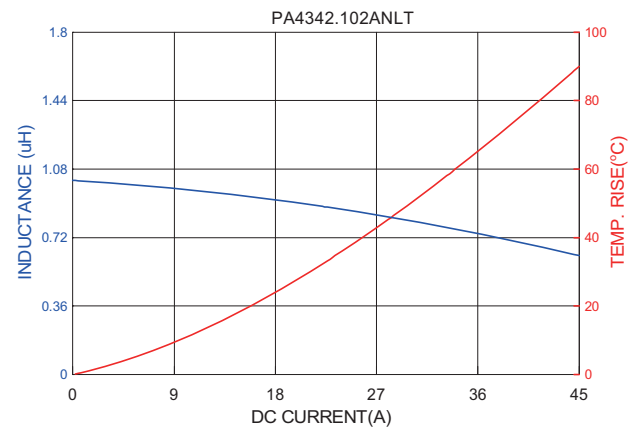
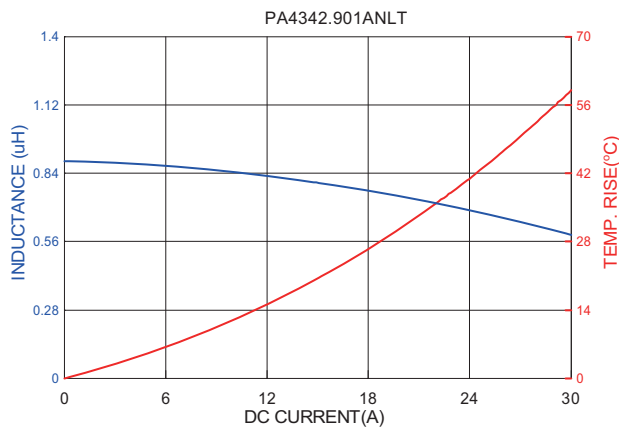
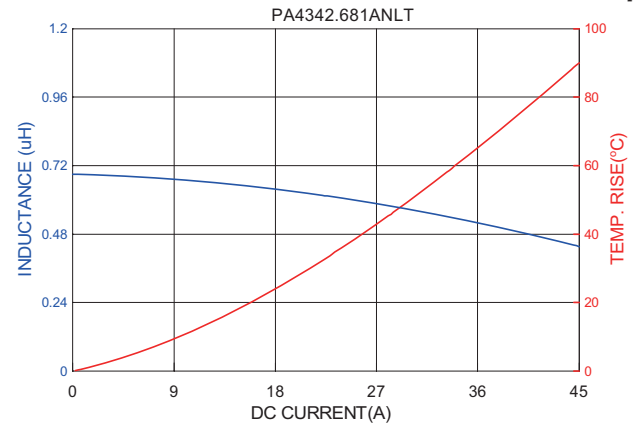
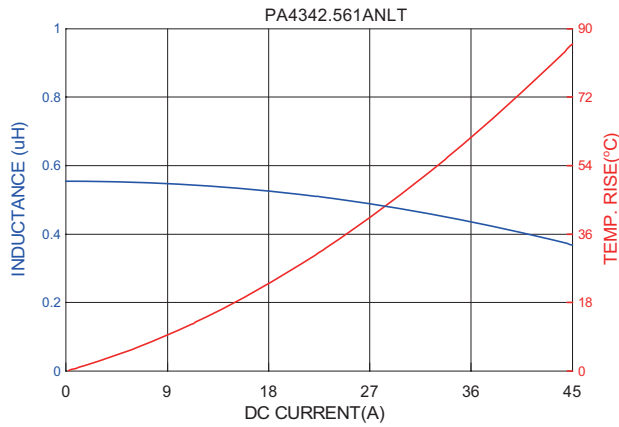
TYPE	REEL SIZE (mm)		TAPE SIZE (mm)			QTY PCS/REEL
	A	G	P ₁	W	K ₀	
PA4342.XXXANLT	Ø330	24.4	16	24	4.5	500

Typical Performance Curves



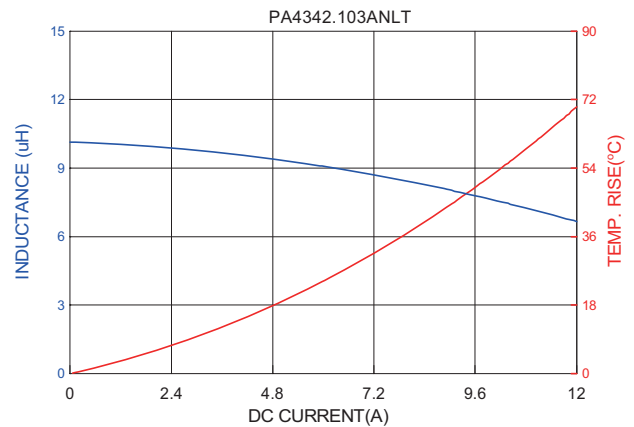
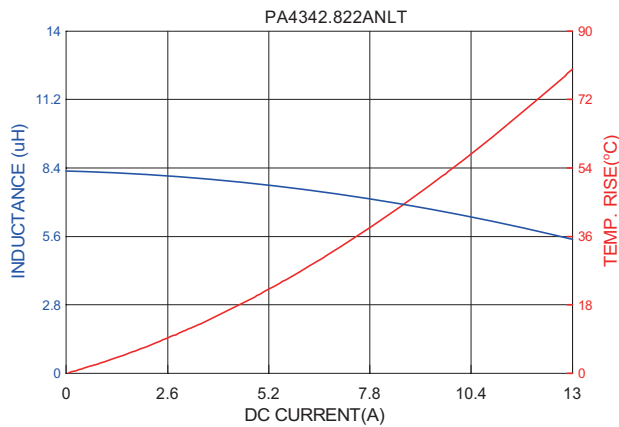
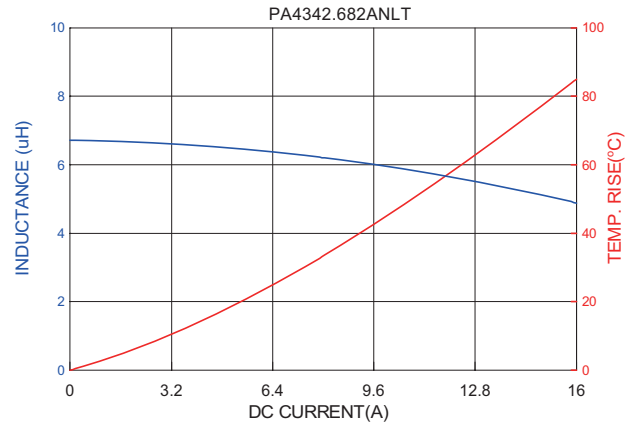
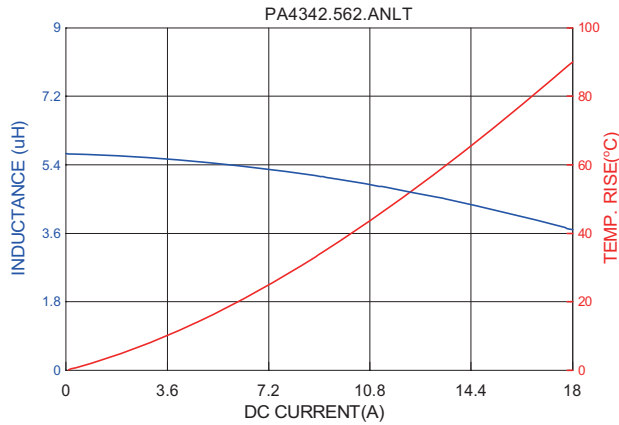
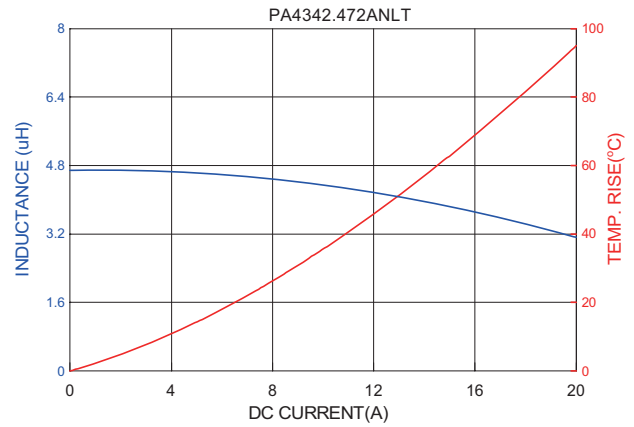
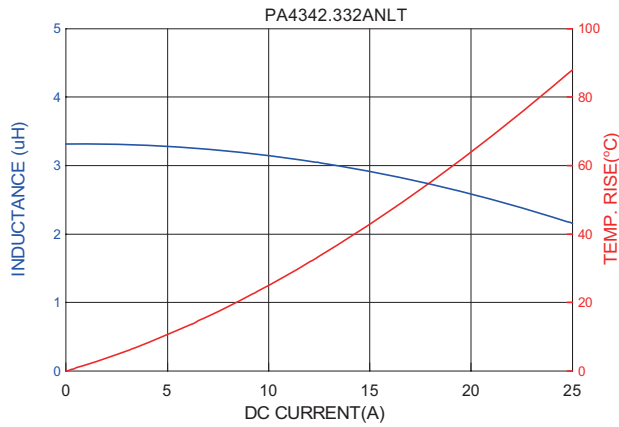
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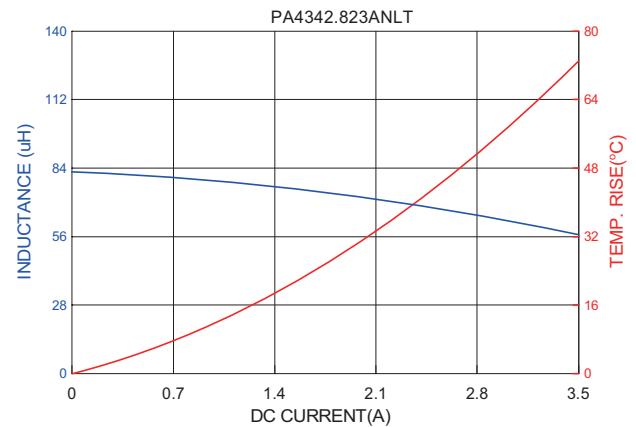
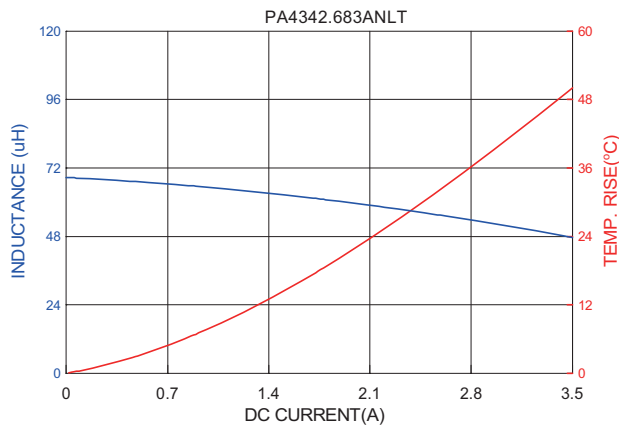
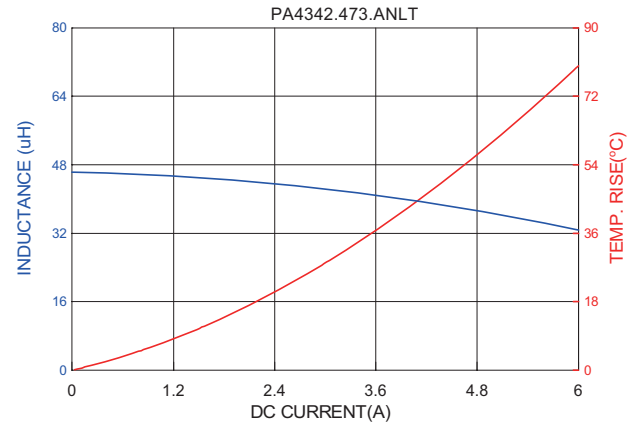
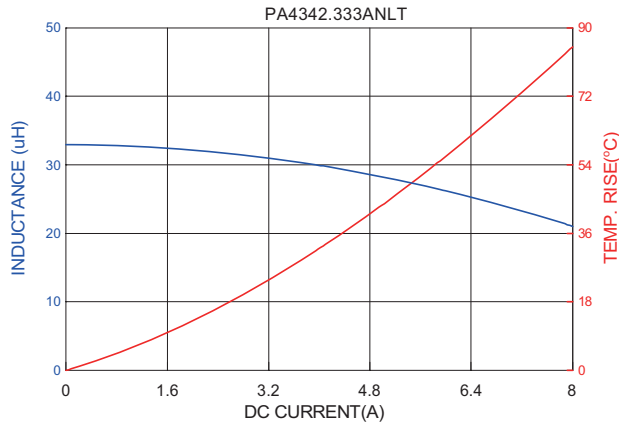
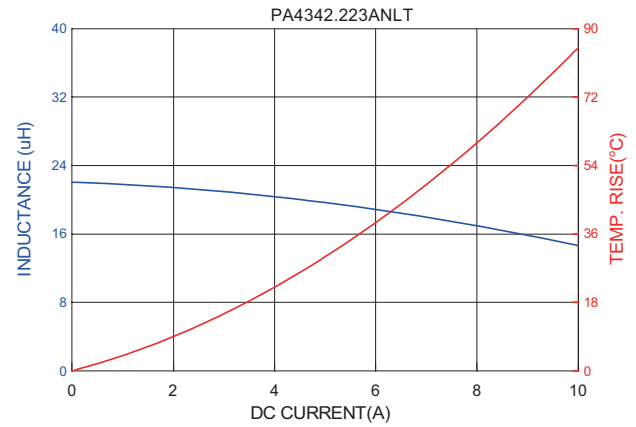
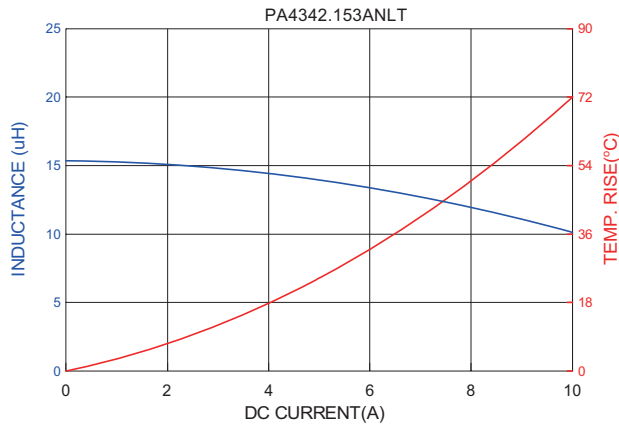
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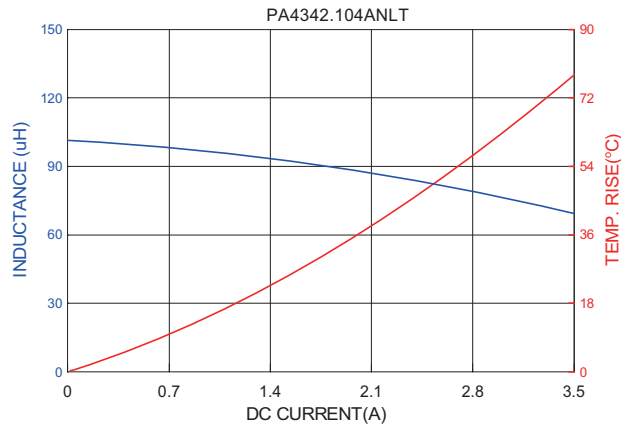
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