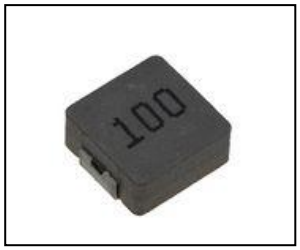
HIGH CURRENT INDUCTORS

MODEL NO : SMI-130065HC SERIES



Features :

∗ Solid structure with lower loss, low profile, high power, low DCR.
∗ More efficient noise suppression.
∗ Custom designs available.
∗ Compliant with RoHS and REACH.

Application :

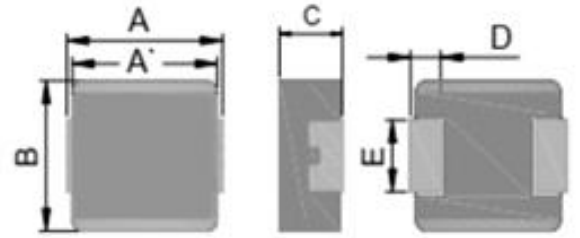
∗ DC/DC converter in power regulation system.

Electrical Specification :

PART NO	INDUCTANCE ±20% (uH)	DCR (mΩ)		TEMPERATURE RISE CURRENT (ADC) Typical (NOTE2)	SATURATION CURRENT (ADC)Typical (NOTE 3)	TYPE
		TYP	MAX			
SMI-130065HC-R22	0.22	0.47	0.60	53	112	non-leadframe
SMI-130065HC-R33	0.33	0.65	0.80	46	68	non-leadframe
SMI-130065HC-R36	0.36	0.70	0.90	45	66	non-leadframe
SMI-130065HC-R47	0.47	0.90	1.2	41	63	non-leadframe
SMI-130065HC-R56	0.56	1.05	1.2	37	58	non-leadframe
SMI-130065HC-R68	0.68	1.25	1.5	35	55	non-leadframe
SMI-130065HC-R82	0.82	1.5	1.9	33	50	non-leadframe
SMI-130065HC-1R0	1.00	1.7	2.3	30	48	non-leadframe
SMI-130065HC-1R5	1.50	2.5	3.0	27	45	non-leadframe
SMI-130065HC-2R2	2.20	3.8	4.2	22	37	leadframe
SMI-130065HC-3R3	3.30	5.7	6.8	18	30	leadframe
SMI-130065HC-4R7	4.70	7.0	8.4	13.5	28	leadframe
SMI-130065HC-5R6	5.60	8.5	10	12.5	23	leadframe
SMI-130065HC-6R8	6.80	9.5	11.5	11.5	18	leadframe
SMI-130065HC-8R2	8.20	12.0	15.5	10.5	16	leadframe
SMI-130065HC-100	10.0	13.2	16.5	10.0	15.5	leadframe
SMI-130065HC-150	15.0	23.2	28.0	9.0	13.0	leadframe
SMI-130065HC-220	22.0	32.5	37.0	9.0	12.0	leadframe
SMI-130065HC-330	33.0	48.0	58.0	8.0	11.0	leadframe
SMI-130065HC-470	47.0	76.0	90.0	6.5	9.5	leadframe
SMI-130065HC-680	68.0	110	130	4.8	7.8	leadframe
SMI-130065HC-101	100.0	145	165	4.2	5.5	leadframe

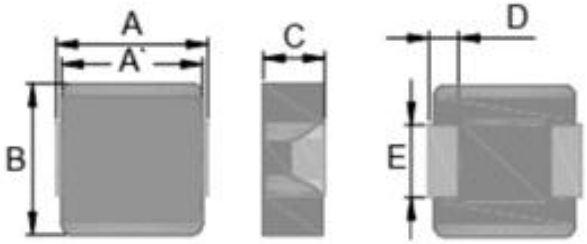
NOTE (1): Test frequency: 100 KHZ ,1.0Vrms.
NOTE (2): ΔT=40℃ approximately under the temperature rise current.
NOTE (3): The saturation current indicates the value of DC current is approximately 30% lower than its initial value of inductance.
NOTE (4): Operating temperature range: -40℃~+125℃. (Including self-temperature rise).
NOTE (5): The part temperature (ambient + temp rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
NOTE (6): Storage time :The recommended storage time of Inductor is maximum 12 months, and don't suggest to use the parts over 12 months.

Physical Dimension : (unit :mm)



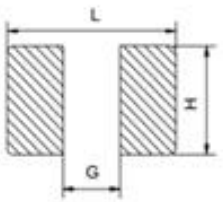
TOP VIEW BOTTOM VIEW

leadframe



TOP VIEW BOTTOM VIEW

non-leadframe



PCB PATTERN

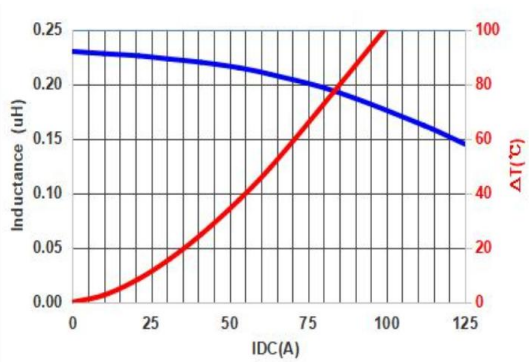
L(mm)	G(mm)	H(mm)
14.2	8.0	5.0

Note: 1. The above PCB layout reference only
2. Recommend solder paste thickness at 0.15mm and above.

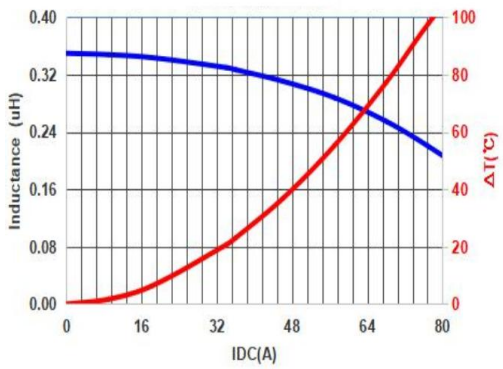
A(mm)	A'(mm)	B(mm)	C(mm)	D(mm)	E(mm)
13.5±0.5	12.5±0.3	12.5±0.3	6.2±0.3	2.3±0.3	4.7±0.3

Performance Graphs

SMI-130065HC-R22



SMI-130065HC-R33



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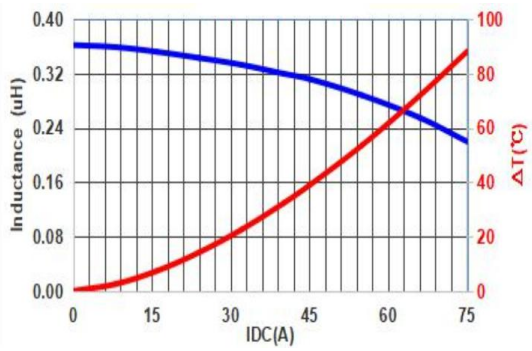

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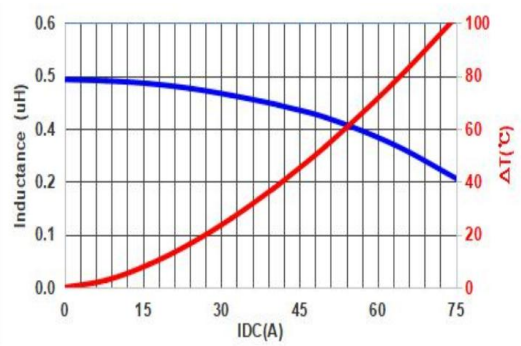
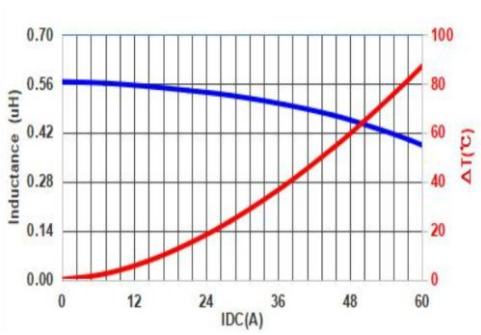


SMI-130065HC-R56



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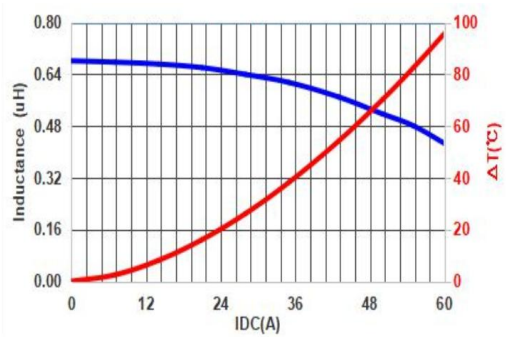

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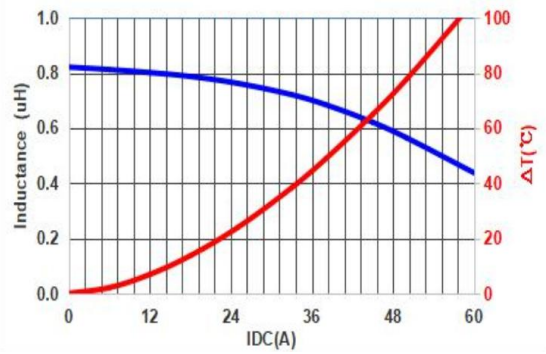

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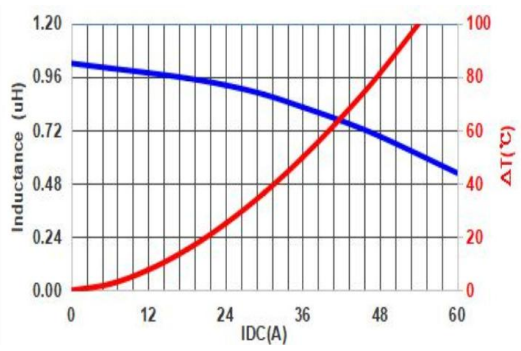

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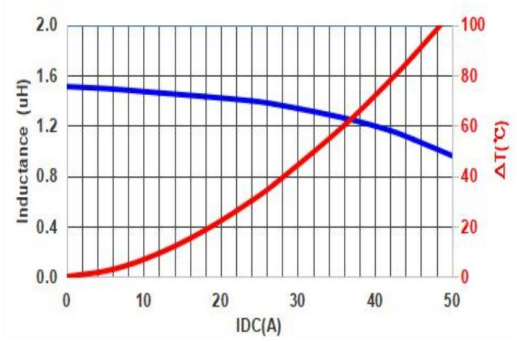

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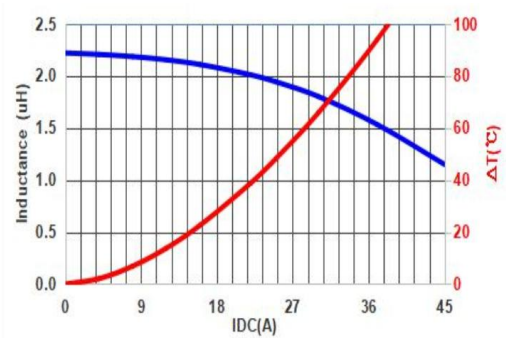

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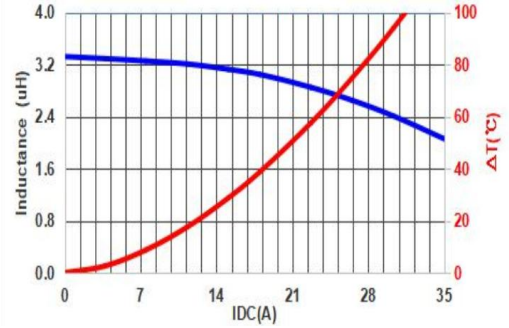
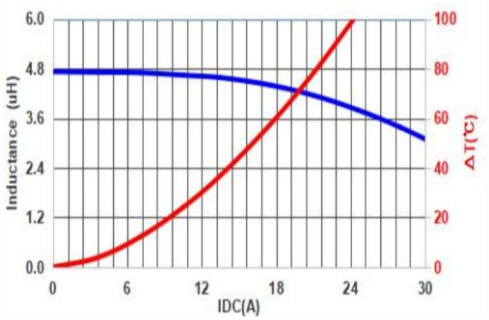


SMI-130065HC-4R7



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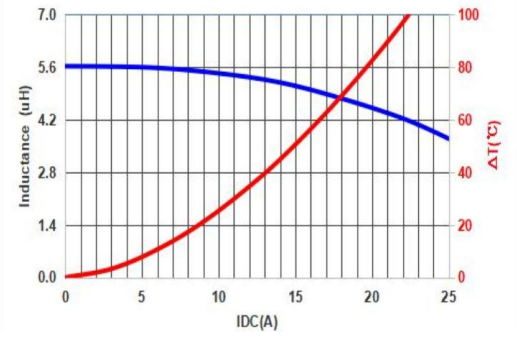

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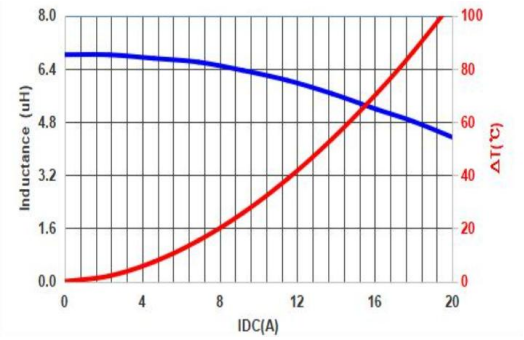

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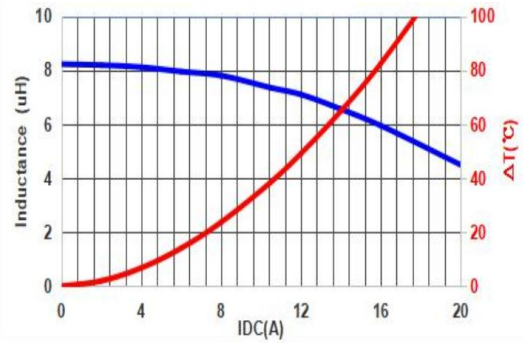

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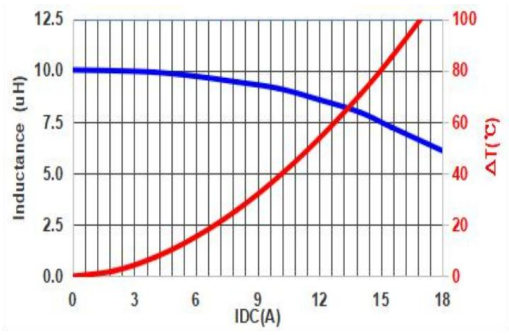

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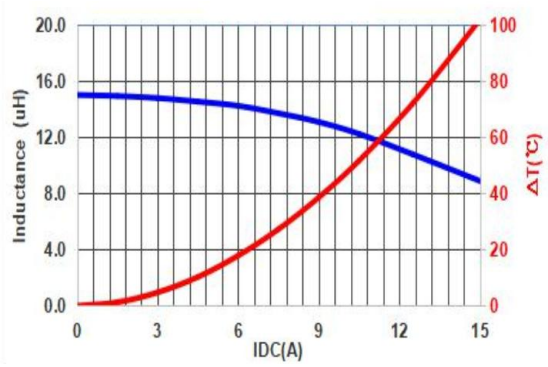

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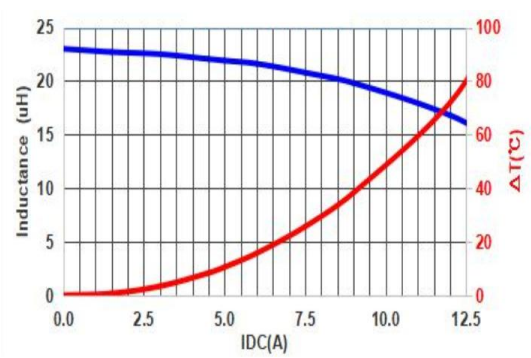

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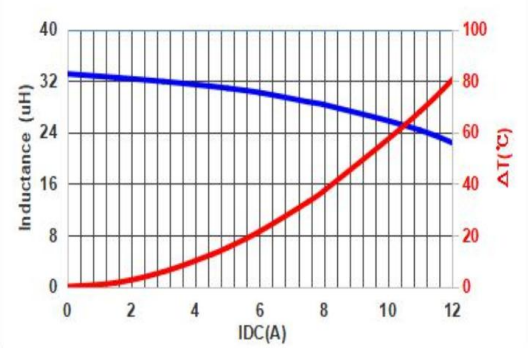

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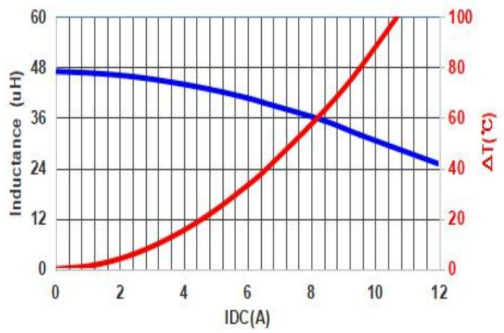
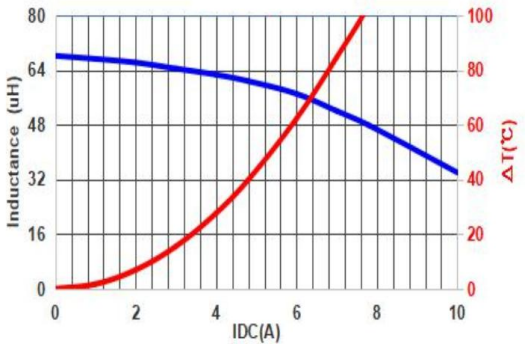


SMI-130065HC-680



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