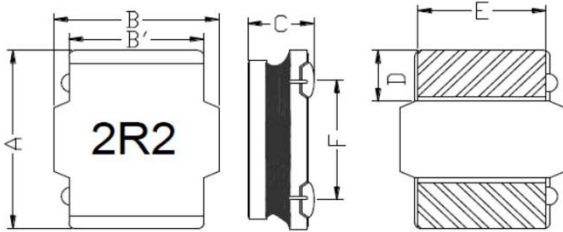


1. Features

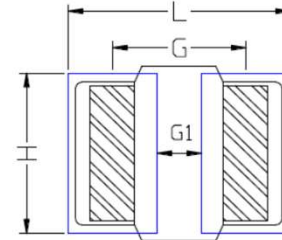
1. This specification applies Low Profile Power Inductors
2. 100%Lead(Pb)&Halogen-Free and RoHS compliant.
3. Operating temperature-40~+125°C (Including self - temperature rise)



2. Dimension



Recommended Land pattern



Series	A(mm)	B(mm)	B'(mm)	C(mm)	D(mm)	E(mm)	F(mm)
HPC6045NF	6.0±0.3	6.0±0.3	4.8±0.2	4.2±0.3	1.7±0.3	4.5±0.3	4.25±

L(mm)	G(mm)	G1(mm)	H(mm)
6.5	4.25	1.80min	4.8

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

3. Part Numbering

HPC
6045
NF
-
2R2
Y

A B C D E

A: Series
 B: Dimension A/B*C
 C: Type
 D: Inductance 2R2=2.20uH 100=10uH,101=100uH
 E: Inductance Tolerance M=±20%,Y=±30%.
 marking direction cannot decide polarity. Color: Black, unidirectional.
 magnetic shielding

4. Specification

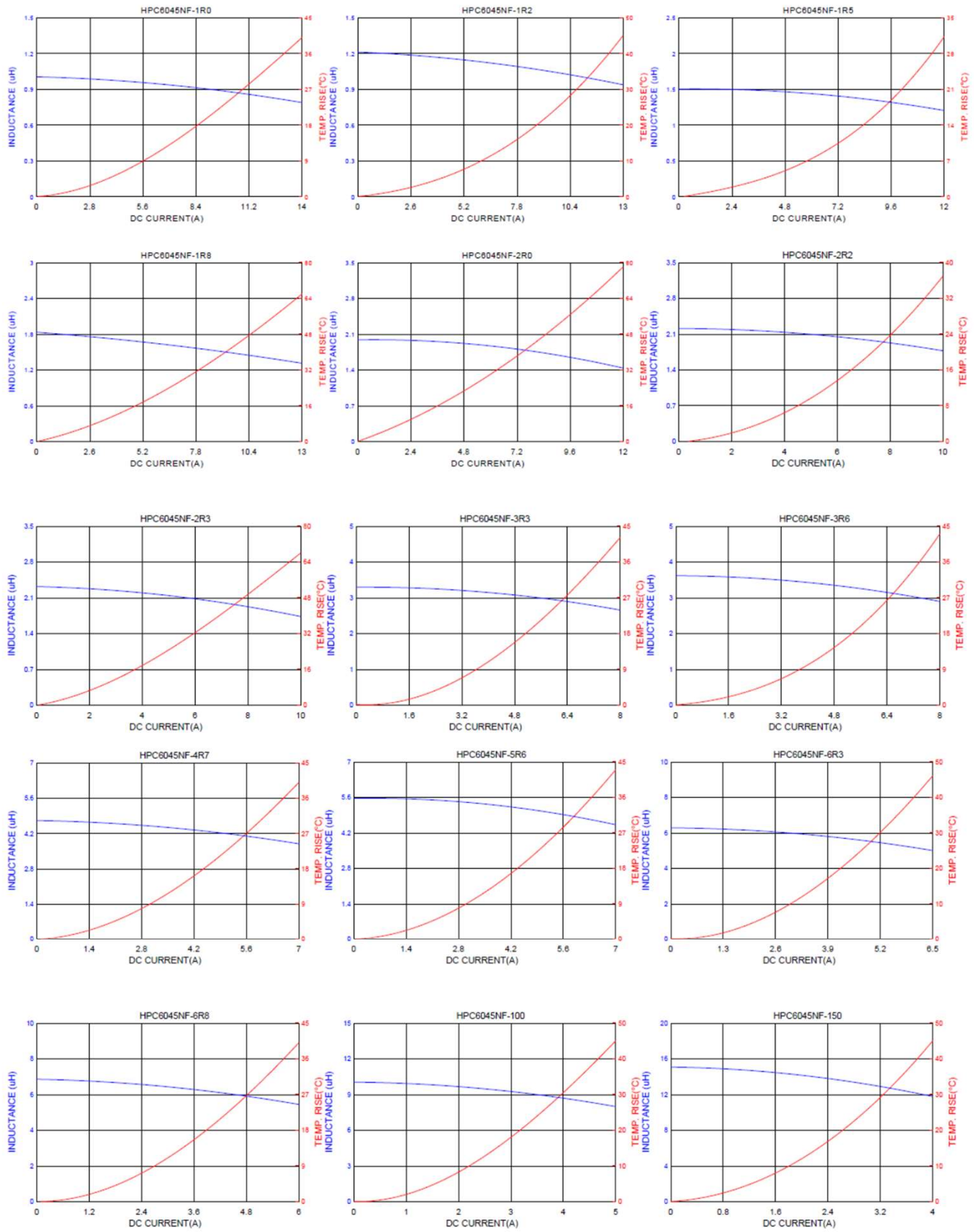
Part Number	Inductance L0 (uH) @ 0 A	Tolerance				Rated current				DCR (mΩ) @25°C ±20%.
						Temperature current I rms (A)		Saturation current I sat (A)		
		K	L	M	Y	Typ	Max	Typ	Max	
HPC6045NF-1R0	1.00	/	/	±20%	±30%	8.00	7.30	13.50	12.50	10.0
HPC6045NF-1R2	1.20	/	/	±20%	±30%	7.50	7.00	12.50	11.50	10.5
HPC6045NF-1R5	1.50	/	/	±20%	±30%	7.00	6.60	12.00	11.00	11.7
HPC6045NF-1R8	1.80	/	/	±20%	±30%	6.80	6.20	11.00	10.00	12.0
HPC6045NF-2R0	2.00	/	/	±20%	±30%	6.50	5.80	10.50	9.50	13.5
HPC6045NF-2R2	2.20	/	/	±20%	±30%	6.00	5.30	9.50	8.55	15.0
HPC6045NF-2R3	2.30	/	/	±20%	±30%	5.80	5.00	9.30	8.20	16.0
HPC6045NF-3R3	3.30	/	/	±20%	±30%	5.00	4.50	7.80	7.30	21.0
HPC6045NF-3R6	3.60	/	/	±20%	±30%	4.90	4.30	7.40	6.90	22.5
HPC6045NF-4R7	4.70	/	±15%	±20%	±30%	4.50	4.00	6.80	6.20	26.0
HPC6045NF-5R6	5.60	/	±15%	±20%	±30%	4.10	3.70	6.40	5.70	31.0
HPC6045NF-6R3	6.30	/	±15%	±20%	±30%	3.80	3.50	5.90	5.30	33.0
HPC6045NF-6R8	6.80	/	±15%	±20%	±30%	3.60	3.30	5.70	5.15	34.0
HPC6045NF-100	10.0	±10%	±15%	±20%	±30%	3.20	2.60	4.60	4.20	52.0
HPC6045NF-150	15.0	±10%	±15%	±20%	±30%	2.80	2.20	3.80	3.30	71.0
HPC6045NF-220	22.0	±10%	±15%	±20%	±30%	2.30	1.90	3.30	2.70	96.0
HPC6045NF-330	33.0	±10%	±15%	±20%	±30%	1.80	1.50	2.50	2.10	145
HPC6045NF-470	47.0	±10%	±15%	±20%	±30%	1.60	1.20	2.00	1.75	200
HPC6045NF-680	68.0	±10%	±15%	±20%	±30%	1.10	0.92	1.60	1.52	305
HPC6045NF-101	100	±10%	±15%	±20%	±30%	0.92	0.82	1.33	1.25	456
HPC6045NF-151	150	±10%	±15%	±20%	±30%	0.75	0.70	1.10	1.00	626
HPC6045NF-331	330	±10%	±15%	±20%	±30%	0.55	0.45	0.60	0.55	1400
HPC6045NF-471	470	±10%	±15%	±20%	±30%	0.40	0.35	0.50	0.45	2050

Note:

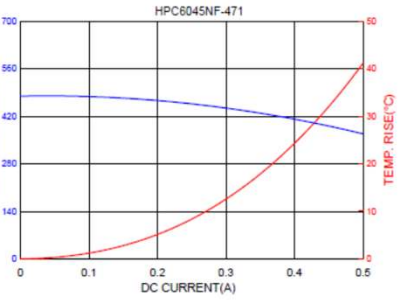
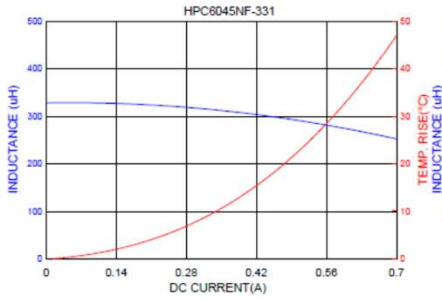
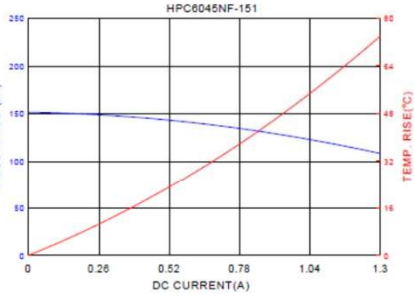
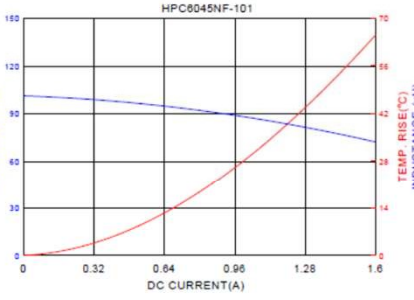
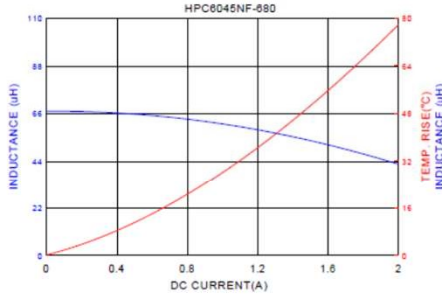
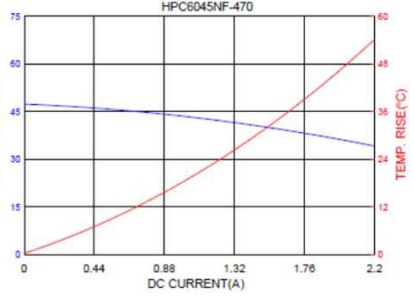
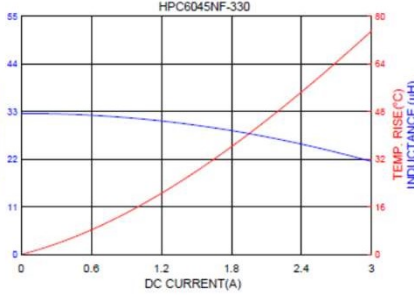
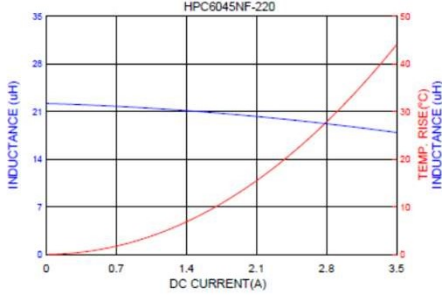
1. All test data referenced to 25°C ambient , Ls/Q:1MHz/1V.
2. Testing Instrument : HP4284A,CH11025,CH3302,CH1320 ,CH1320S LCR METER / Rdc:CH502BC MICRO OHMMETER.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δ t of 40°C
4. Saturation Current (Isat) will cause L0 to drop approximately 30%
5. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. Special inquiries besides the above common used types can be met on your requirement.

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9. Typical Performance Curves



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