

SMD Power Inductor

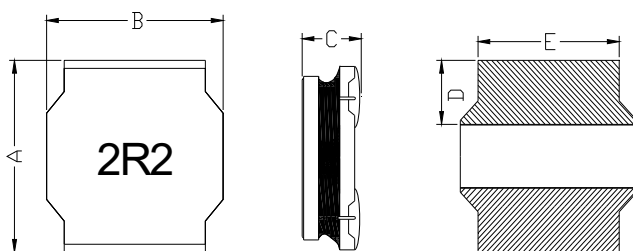
HPC8040NC-SERIES

1. Features

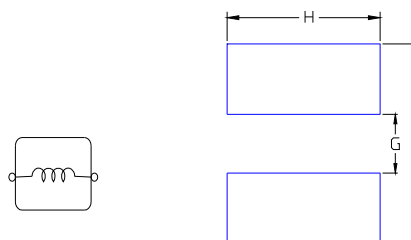
- 1. This specification applies Low Profile Power Inductors.
- 2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
- 3. Operating temperature : -40~+125°C (Including self - temperature rise)



2. Dimension



Recommend Land pattern

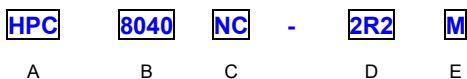


Series	Inductance	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
HPC8040NC	<10uH	8.0±0.3	8.0±0.3	4.2Max	2.4±0.3	6.3±0.3
	≥10uH			3.7±0.3		

L(mm)	G(mm)	H(mm)
8.5	2.8	6.6

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

3. Part Numbering



A: Series
 B: Dimension
 C: Type
 D: Inductance
 E: Inductance Tolerance

A/B*C
 C=for commercial
 2R2=2.20uH, 100=10uH, 101=100uH, 102=1000uH
 K=±10%, L=±15%, M=±20%, N=±25%, Y=±30%.
 marking direction cannot decide polarity. Color: Black, unidirectional magnetic shielding

4. Specification

Part Number	Inductance (uH)±20% @ 0 A	I rms (A)		I sat (A)		DCR (mΩ) ±20%
		Typ	Max	Typ	Max	
HPC8040NC-1R0M	1.00	8.50	8.00	13.80	13.00	8.2
HPC8040NC-1R4M	1.40	8.20	7.80	11.80	11.20	10.0
HPC8040NC-1R5M	1.50	8.00	7.70	11.50	11.00	10.0
HPC8040NC-2R2M	2.20	7.40	6.90	9.80	9.20	11.5
HPC8040NC-3R3M	3.30	6.60	6.20	8.00	7.50	15.0
HPC8040NC-3R6M	3.60	6.40	6.00	7.60	7.00	15.0
HPC8040NC-4R7M	4.70	5.80	5.30	6.70	6.00	19.5
HPC8040NC-5R6M	5.60	5.40	5.20	6.20	5.80	22.0
HPC8040NC-6R8M	6.80	5.10	5.00	5.60	5.10	25.0
HPC8040NC-100M	10.0	4.60	4.20	5.00	4.30	33.0
HPC8040NC-150M	15.0	3.60	3.20	4.00	3.60	50.0
HPC8040NC-220M	22.0	2.90	2.45	3.10	2.80	73.0
HPC8040NC-330M	33.0	2.30	2.10	2.60	2.10	100
HPC8040NC-470M	47.0	2.00	1.70	2.20	1.90	135
HPC8040NC-560M	56.0	1.75	1.60	1.90	1.60	160
HPC8040NC-680M	68.0	1.65	1.50	1.75	1.50	205
HPC8040NC-820M	82.0	1.40	1.30	1.60	1.40	230
HPC8040NC-101M	100	1.20	1.10	1.45	1.20	300
HPC8040NC-121M	120	1.10	1.00	1.30	1.10	350
HPC8040NC-151M	150	0.98	0.90	1.20	1.03	410
HPC8040NC-181M	180	0.91	0.83	1.04	0.94	490
HPC8040NC-221M	220	0.85	0.76	0.99	0.90	610
HPC8040NC-331M	330	0.70	0.66	0.75	0.70	850
HPC8040NC-471M	470	0.63	0.58	0.60	0.55	1300
HPC8040NC-681M	680	0.60	0.55	0.55	0.50	2200

Note:

1. All test data referenced to 25°C ambient . Ls:1MHz/1V. (221 后频率為 100KHz/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 Δt 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.
7. Rated DC current: The lower value of I rms and Isat.

5. Typical Performance Curves

