

SMD Power Inductor

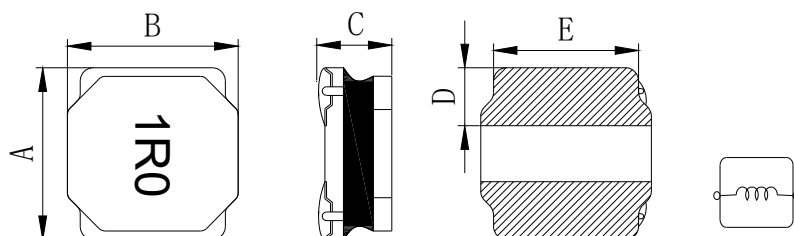
HPC5030NV-SERIES

1. Features

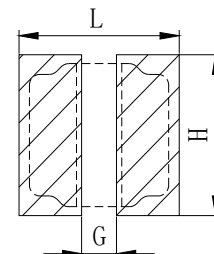
1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
3. High reliability -Reliability tests comply with AEC-Q200
4. Operating temperature : -55~+125°C (Including self - temperature rise)



2. Dimension



Recommend Land pattern



Series	*A(mm)	*B(mm)	*C(mm)	D(mm)	E(mm)
HPC5030NV	5.0±0.2	5.0±0.2	2.8±0.2	1.3±0.3	4.7±0.3

*Dimensions are not including the termination. For maximum overall dimensions with termination , add 0.1mm.

G(mm)	H(mm)	I(mm)
5.5	1.8	5.5

Note: 1. The above PCB layout reference only.
2. Recommend solder paste thickness at 0.12mm and above.

3. Part Numbering

HPC	5030	N	V	-	1R0	M
A	B	C	D		E	F

A: Series

B: Dimension

C: Type

D: :Category Code

E: Inductance

F: Inductance Tolerance

A/B*C

V=Vehicle

1R0=1.00uH

K=±10%, L=±15%, M=±20%, Y=±30%.

marking direction cannot decide polarity. Color: Black, unidirectional.
magnetic shielding

4. Specification

Part Number	Inductance L0 (uH) @ 0 A	Rated current				DCR (mΩ) @25℃ ±20%
		Tempetature current I rms (A)		Saturation current I sat (A)		
		Typ	Max	Typ	Max	
HPC5030NV-R47M	0.47	8.00	7.00	10.00	9.00	10
HPC5030NV-R68M	0.68	6.50	5.50	8.00	7.00	13
HPC5030NV-1R0M	1.00	4.80	4.30	6.50	6.00	16
HPC5030NV-1R5M	1.50	4.20	3.80	6.10	5.60	20
HPC5030NV-2R2M	2.20	3.60	3.30	5.20	4.80	25
HPC5030NV-3R3M	3.30	3.20	2.90	4.20	3.90	34
HPC5030NV-4R7M	4.70	3.00	2.70	3.70	3.50	45
HPC5030NV-6R8M	6.80	2.30	2.10	3.00	2.80	62
HPC5030NV-100M	10.0	2.00	1.80	2.30	2.10	88
HPC5030NV-150M	15.0	1.60	1.40	1.80	1.60	107
HPC5030NV-220M	22.0	1.40	1.20	1.55	1.30	156
HPC5030NV-330M	33.0	1.10	1.00	1.20	1.05	210
HPC5030NV-470M	47.0	0.90	0.80	1.00	0.90	345
HPC5030NV-101M	100	0.75	0.70	0.77	0.72	680

Note:

1. All test data referenced to 25℃ ambient , Ls/Q:100KHz/1V.
2. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
3. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃
4. Saturation Current (Isat) will cause L0 to drop approximately 30%.
5. Rated DC current: The lower value of I rms and Isat.
6. The part temperature (ambient + temp rise) should not exceed 125℃ 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.
7. Special inquiries besides the above common used types can be met on your requirement.

10. Typical Performance Curves

