

# SMD Power Inductor

HPC4030NV-Series

## 1. Features

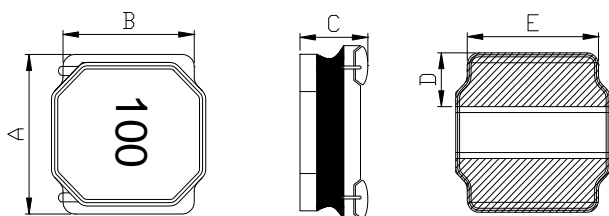
1. Magnetic-resin shielded construction reduces buzz noise to ultra-low levels
2. Metallization on ferrite core results in excellent shock resistance and damage-free durability
3. Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI)
4. 30% higher current rating than conventional inductors of equal size
5. Takes up less PCB real estate and save more power
6. High reliability -Reliability test complied to AEC-Q200



## 2. Applications

1. LED Lighting
2. Next-generation mobile devices with multifunction such as mobile TV and digital movie cameras
3. Flat-screen TVs, blue-ray disc recorders, set top box
4. Notebooks, desktop computers, servers, graphic cards cards
5. Portable gaming devices, personal navigation systems, personal multimedia devices
6. Automotive systems
7. Telecomm base stations

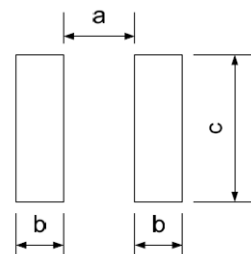
## 3. Dimension



Series	*A(mm)	*B(mm)	C(mm)	D(mm)	E(mm)
HPC4030NV	4.0±0.2	4.0±0.2	3.0Max.	1.35±0.3	3.4±0.2

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

## Recommended Land pattern



a(mm)	b(mm)	c(mm)
1.3Typ	1.5Typ	3.7Typ

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

## 4. Part Numbering



- A: Series
  - B: Dimension
  - C: Type
  - D: Inductance
  - E: Inductance Tolerance
- A/B\*C  
V: Vehicle  
1R0=1.00uh 100=10uh,101=100uh,102=1000uh  
K=±10%, L=±15%,M=±20%,Y=±30%.  
marking direction cannot decide polarity. Color: Black, unidirectional.  
magnetic shielding

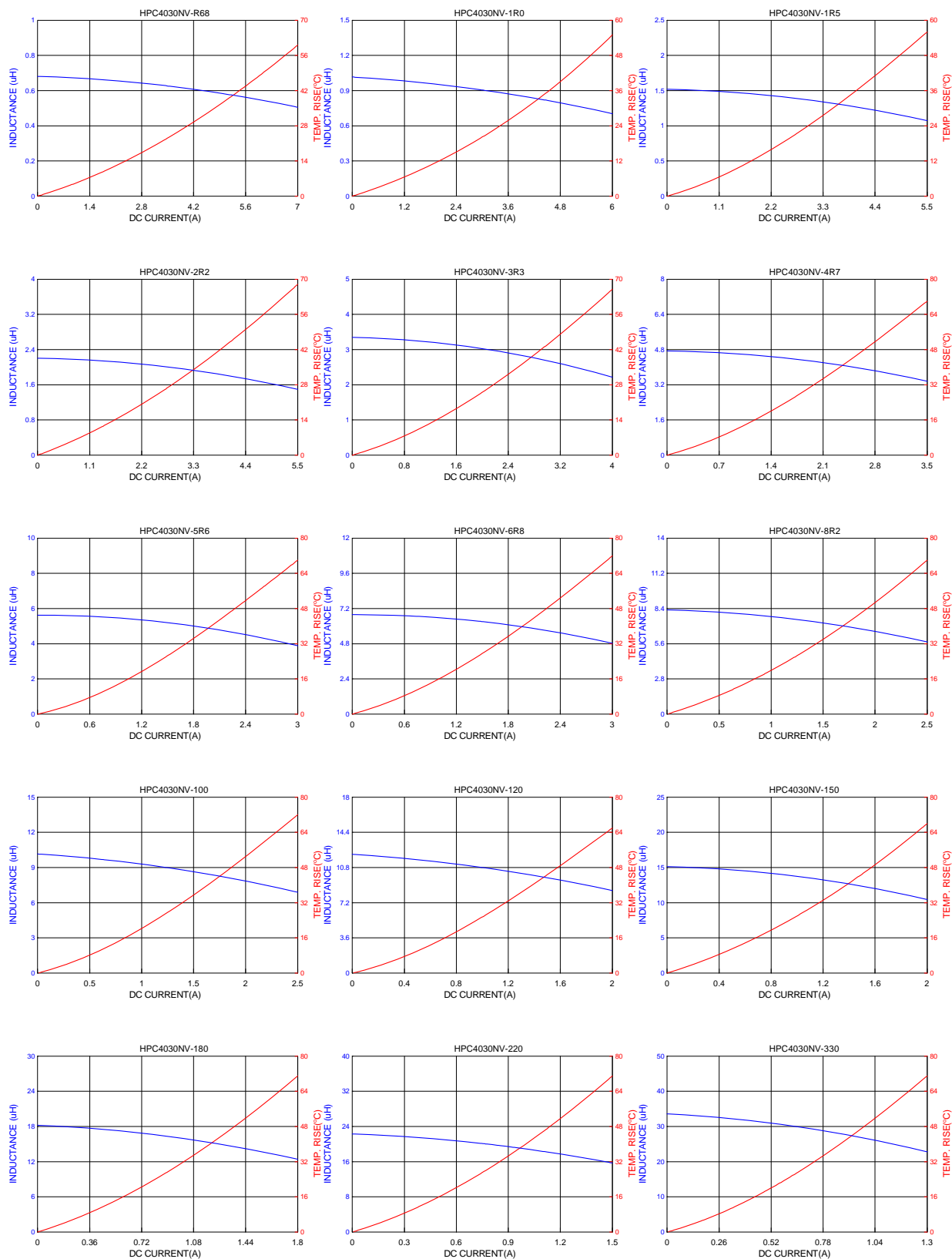
## 5. Specification

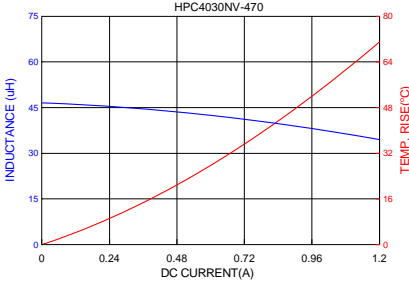
Part Number	Inductance L0 (uH)±20% @ 0 A	Rated current		DCR (mΩ) @25°C ±20%.
		Temperature current I rms (A)	Saturation current I sat (A)	
HPC4030NV-R68M	0.68	4.60	6.80	10
HPC4030NV-1R0M	1.00	4.20	5.30	14
HPC4030NV-1R5M	1.50	3.40	4.90	20
HPC4030NV-2R2M	2.20	3.00	4.90	30
HPC4030NV-3R3M	3.30	2.40	3.30	40
HPC4030NV-4R7M	4.70	2.05	2.90	60
HPC4030NV-5R6M	5.60	1.95	2.60	65
HPC4030NV-6R8M	6.80	1.80	2.75	90
HPC4030NV-8R2M	8.20	1.60	2.10	90
HPC4030NV-100M	10.0	1.50	2.00	100
HPC4030NV-120M	12.0	1.30	1.80	135
HPC4030NV-150M	15.0	1.20	1.70	190
HPC4030NV-180M	18.0	1.10	1.50	200
HPC4030NV-220M	22.0	1.00	1.30	225
HPC4030NV-330M	33.0	0.85	1.10	330
HPC4030NV-470M	47.0	0.72	0.95	445

Note:

1. All test data referenced to 25°C ambient , Ls: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.

### 6. Typical Performance Curve





单击下面可查看定价，库存，交付和生命周期等信息

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