

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-complied with AEC-Q200.
7. 100% Lead(Pb)-Free & Halogen-Free and RoHS compliant.



AEC-Q200

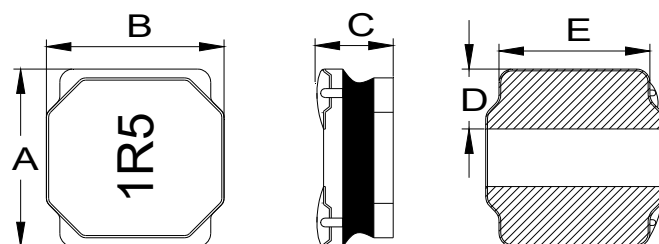
2. Applications

For automotive applications.

3. 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

4. Dimension

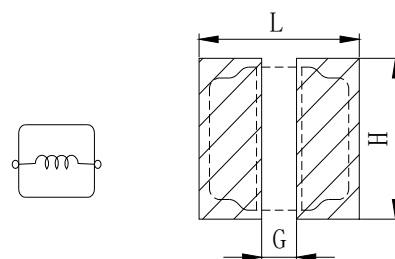


*A	*B	*C	D	E
4.0±0.2	4.0±0.2	2.8±0.2	1.35±0.3	3.4±0.4

Unit:mm

*Termination are not included in dimension. For maximum overall dimensions with termination , add 0.1mm.

Recommend Land pattern



L	G	H
4.5	1.5	4.5

Note:

1. PCB layout is referred to IPC-7351B standard
2. The above PCB layout is for reference only.

5. Part Numbering

THPC	4030	NV	-	1R5	M
A	B	C		D	E

A: Series

B: Dimension

C: Type

D: Inductance

E: Inductance Tolerance

A/B*C

1R5=1.50uH

M=±20%

[Anti-static packaging](#)

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

6. Specification

Part Number	Inductance (uH) $\pm 20\%$ @ 0 A DC	I rms (A)		I sat (A)		DCR (m Ω) $\pm 20\%$
		Typ	Max	Typ	Max	
THPC4030NV-R68M	0.68	4.60	4.00	6.80	5.80	10
THPC4030NV-1R0M	1.00	4.20	3.50	5.30	4.60	14
THPC4030NV-1R5M	1.50	3.40	2.90	4.90	4.00	20
THPC4030NV-2R2M	2.20	3.00	2.50	4.20	3.60	30
THPC4030NV-3R3M	3.30	2.40	2.10	3.30	2.70	40
THPC4030NV-4R7M	4.70	2.05	1.80	2.90	2.40	60
THPC4030NV-5R6M	5.60	1.95	1.60	2.70	2.10	65
THPC4030NV-6R8M	6.80	1.80	1.50	2.40	2.00	90
THPC4030NV-8R2M	8.20	1.60	1.40	2.10	1.80	95
THPC4030NV-100M	10.0	1.50	1.30	2.00	1.70	100
THPC4030NV-120M	12.0	1.30	1.20	1.80	1.60	135
THPC4030NV-150M	15.0	1.20	1.10	1.70	1.40	190
THPC4030NV-180M	18.0	1.10	1.00	1.50	1.25	200
THPC4030NV-220M	22.0	1.00	0.90	1.30	1.15	225
THPC4030NV-330M	33.0	0.85	0.80	1.10	0.85	330
THPC4030NV-470M	47.0	0.72	0.65	0.95	0.75	445

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data are tested to 25°C ambient.
3. Testing Instrument (or eq.): Agilent 4284A,E4991A,4339B,KEYSIGHT E4980A/AL,chroma3302,3250,16502.
4. Heat rated current (Irms): current that cause temperature to rise approximately ΔT of 40°C.
5. Saturation current (Isat): current that cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp. rise) should not exceed 125°C under worst case operating conditions.Circuit design, PCB trace and thickness, airflow and other cooling conditions all affect the part temperature. Part temperature should be verified in the end application.
7. I rms Test : temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
8. Rated DC current: the lower value of I rms and Isat.

7. Typical Performance Curve

