

Power Inductor

HPC201608BMV-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 to AEC-Q200.

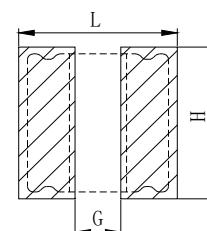
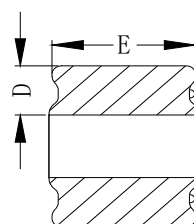
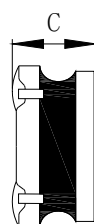
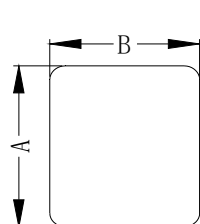


2、Applications

Automotive applications.

3、Dimension

Recommended Land pattern



Series	*A(mm)	*B(mm)	*C(mm)	D(mm)	E(mm)
HPC201608BMV	2.0±0.2	1.6±0.2	0.7±0.1	0.7±0.3	1.8±0.3

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

L(mm)	G(mm)	H(mm)
2.5	0.5	2.1

Note: 1. The above PCB layout reference only.
2. Recommend solder paste thickness at 0.10mm and above.

4、Part Numbering

HPC	201608	BM	V	-	2R2	-	M
A	B	C	D		E		F

A: Series

B: Dimension

C: Lead Free

D: Code

E: Inductance

F: Inductance Tolerance

V=Vehicle

2R2=2.2uH

K=± 10%, L=± 15%,M=± 20%,Y=± 30%.

5、Specification

TAI-TECH Part Number	Inductance L0 A(uH)	I rms(A)		I sat (A)		DCR (m Ω)	
		typ	max	typ	max	typ	max
HPC201608BMV-R33M	0.33	3.00	2.80	2.40	2.20	33	39.6
HPC201608BMV-R47M	0.47	2.80	2.60	2.05	1.90	42	50.4
HPC201608BMV-R68M	0.68	2.40	2.20	1.65	1.50	56	67.2
HPC201608BMV-R82M	0.82	2.20	2.00	1.55	1.40	69	82.2
HPC201608BMV-1R0M	1.00	2.10	1.90	1.40	1.30	75	90
HPC201608BMV-1R5M	1.50	2.00	1.80	1.20	1.10	110	132
HPC201608BMV-2R2M	2.20	1.70	1.50	1.00	0.90	160	196
HPC201608BMV-3R3M	3.30	1.50	1.30	0.85	0.75	230	276
HPC201608BMV-4R7M	4.70	1.20	1.00	0.70	0.63	440	528
HPC201608BMV-5R6M	5.60	0.90	0.80	0.61	0.55	475	570
HPC201608BMV-6R8M	6.80	0.70	0.60	0.55	0.50	575	630
HPC201608BMV-8R2M	8.20	0.65	0.55	0.52	0.47	680	816
HPC201608BMV-100M	10.0	0.60	0.50	0.50	0.45	860	1032
HPC201608BMV-150M	15.0	0.50	0.40	0.40	0.35	1300	1560

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument(or equ) : Agilent 4284A,E4991A,4339B,KEYSIGHT E4980A/AL,chroma3302,3250,16502.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
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. Irms Testing : 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 Irms and Isat.

11、Typical Performance Curves

