

Power Inductor

HPC252008BMV-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.



AEC-Q200

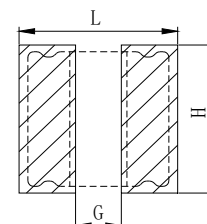
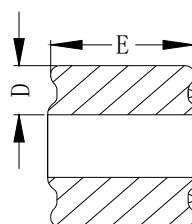
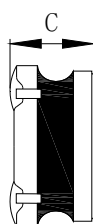
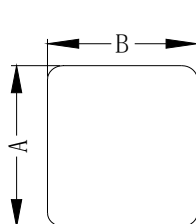


2、Applications

Automotive applications.

3、Dimension

Recommended Land pattern



Series	*A(mm)	*B(mm)	*C(mm)	D(mm)	E(mm)
HPC252008BMV	2.5±0.2	2.0±0.2	0.7±0.1	0.9±0.3	2.0±0.2

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

L(mm)	G(mm)	H(mm)
3.0	0.7	2.5

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

4、Part Numbering

HPC	252008	BM	V	-	2R2	-	M
A	B	C	D		E		F

A: Series

B: Dimension

C: Lead Free

D: Code

V=Vehicle

E: Inductance

2R2=2.2uH

F: Inductance Tolerance

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 (mΩ)	
		typ	max	typ	max	typ	max
HPC252008BMV-R47M	0.47	2.60	2.40	2.40	2.20	46	55
HPC252008BMV-R68M	0.68	2.40	2.20	2.20	2.05	61	73
HPC252008BMV-R82M	0.82	2.30	2.10	2.10	2.00	77	92
HPC252008BMV-1R0M	1.00	2.15	1.95	1.90	1.70	80	96
HPC252008BMV-1R2M	1.20	2.10	1.90	1.85	1.65	100	120
HPC252008BMV-1R5M	1.50	2.00	1.80	1.70	1.55	130	156
HPC252008BMV-2R2M	2.20	1.80	1.60	1.40	1.25	175	210
HPC252008BMV-3R3M	3.30	1.50	1.30	1.10	1.00	245	294
HPC252008BMV-4R7M	4.70	1.25	1.05	1.00	0.90	350	420
HPC252008BMV-5R6M	5.60	1.10	1.00	0.85	0.80	385	462
HPC252008BMV-6R8M	6.80	1.00	0.90	0.80	0.75	530	636
HPC252008BMV-8R2M	8.20	0.85	0.70	0.70	0.60	650	780
HPC252008BMV-100M	10.0	0.75	0.60	0.63	0.56	890	1068
HPC252008BMV-150M	15.0	0.60	0.50	0.50	0.45	1200	1440
HPC252008BMV-220M	22.0	0.50	0.42	0.42	0.38	1800	2160

Note:

1. Test frequency : L_s : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Testing Instrument(or equ) : Agilent 4284A,E4991A,4339B,KEYSIGHT E4980A/AL,chroma3302,3250,16502.
4. Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately ΔT of 40°C
5. Saturation Current (I_{sat}) will 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, 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. I_{rms} 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 I_{rms} and I_{sat}.

11、Typical Performance Curves

