

Power Inductor

AHP4020BMV-SERIES

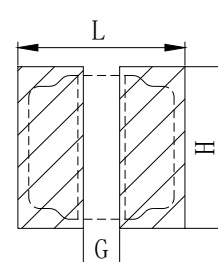
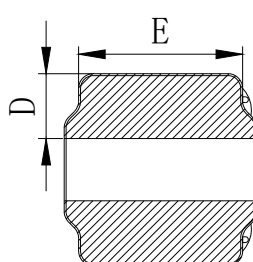
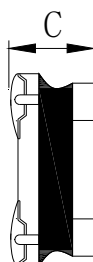
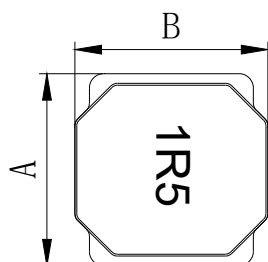
1. Features

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℃(Including self - temperature rise)



2. Dimension

Recommend Land pattern



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
AHP4020BMV	4.0±0.2	4.0±0.2	1.8±0.2	1.1±0.3	3.5±0.3

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

L(mm)	G(mm)	H(mm)
4.5	1.5	4.5

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

3. Part Numbering

AHP	4020	BM	V	-	1R5	M
A	B	C	D		E	F

A: Series

B: Dimension

C: Control S/N

D:Category Code

E: Inductance

F: Inductance Tolerance

Black marking

V=Vehicle

1R5=1.50uH

K=± 10%, L=± 15%, M=± 20%, Y=± 30%.

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

4. Specification

TAI-TECH Part Number	Inductance (μ H)	I rms (A)		I sat (A)		DCR ($m\Omega$)	
		typ	Max	typ	Max	typ	Max
AHP4020BMV-R22M	0.22	9.50	8.20	23.0	19.0	9.50	10.90
AHP4020BMV-R47M	0.47	8.00	7.00	16.0	14.0	14.0	16.1
AHP4020BMV-R60M	0.60	7.50	6.50	13.0	10.0	17.1	19.0
AHP4020BMV-R68M	0.68	7.40	6.40	12.0	9.0	18.0	20.7
AHP4020BMV-1R0M	1.00	6.70	5.80	11.1	8.70	22.0	26.0
AHP4020BMV-1R5M	1.50	6.00	5.20	10.0	8.00	30.0	36.0
AHP4020BMV-2R2M	2.20	5.00	4.30	7.60	6.20	40.0	48.0
AHP4020BMV-3R3M	3.30	4.00	3.50	5.90	4.80	60.0	72.0
AHP4020BMV-4R7M	4.70	3.30	2.90	5.10	4.30	90.0	108.0
AHP4020BMV-6R8M	6.80	2.80	2.40	4.60	3.70	128.0	154.0
AHP4020BMV-100M	10.0	2.40	2.00	4.00	3.20	180.0	216.0

Note:

1. All test data referenced to 25°C ambient , [Ls:1MHz/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 (I sat) 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.
7. Rated DC current: The lower value of I rms and I sat.

10. Typical Performance Curve

