

SMD Power Inductor

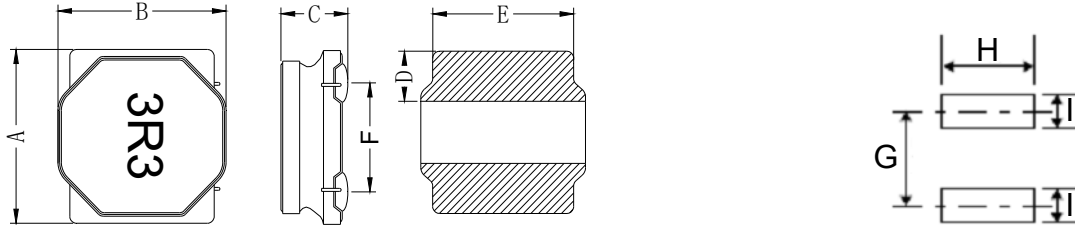
HPC4018BMV-SERIES

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°C (Including self - temperature rise)



2. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)
HPC4018BMV	4.0±0.2	4.0±0.2	1.6±0.2	1.1±0.2	3.5±0.3	2.5±0.2	2.8 ref	3.7 ref	1.2 ref

3. Part Numbering



- A: Series
- B: Dimension
- C: Control S/N
- D: Category Code
- E: Inductance
- F: Inductance Tolerance

Black marking
 V=Vehicle
 3R3=3.30uH
 K=±10%, L=±15%, M=±20%, Y=±30%.
 marking direction cannot decide polarity. Color: Black, unidirectional.
 magnetic shielding

4. Specification

Part Number	Inductance (uH)	Test Frequency (Hz)	DCR (Ω) ±20%	I rms (A)	I sat (A)
HPC4018BMV-R47M	0.47	1V100K	0.015	5.50	6.00
HPC4018BMV-R56M	0.56	1V100K	0.019	4.5	5.00
HPC4018BMV-1R0Y	1.00	1V100K	0.027	3.20	4.00
HPC4018BMV-1R2Y	1.20	1V100K	0.030	2.80	3.70
HPC4018BMV-1R5Y	1.50	1V100K	0.037	2.40	3.30
HPC4018BMV-1R8M	1.80	1V100K	0.040	2.30	3.20
HPC4018BMV-2R2M	2.20	1V100K	0.042	2.20	3.00
HPC4018BMV-2R7M	2.70	1V100K	0.050	2.10	2.60
HPC4018BMV-3R3M	3.30	1V100K	0.055	2.00	2.30
HPC4018BMV-4R7M	4.70	1V100K	0.070	1.70	2.00
HPC4018BMV-6R8M	6.80	1V100K	0.098	1.45	1.60
HPC4018BMV-7R5M	7.50	1V100K	0.120	1.35	1.50

Part Number	Inductance (uH)	Test Frequency (Hz)	DCR (Ω) $\pm 20\%$	I rms (A)	I sat (A)
HPC4018BMV-100M	10.0	1V100K	0.150	1.20	1.30
HPC4018BMV-150M	15.0	1V100K	0.210	0.85	1.10
HPC4018BMV-220M	22.0	1V100K	0.290	0.72	0.90
HPC4018BMV-330M	33.0	1V100K	0.460	0.55	0.70
HPC4018BMV-470M	47.0	1V100K	0.650	0.44	0.60
HPC4018BMV-680M	68.0	1V100K	1.000	0.32	0.52
HPC4018BMV-101M	100.0	1V100K	1.450	0.28	0.42
HPC4018BMV-151M	150.0	1V100K	2.300	0.22	0.34
HPC4018BMV-221M	220.0	1V100K	3.800	0.17	0.275

Note:

I_{sat}: Saturation Current (I_{sat}) will cause L0 to drop approximately 30%.

I_{rms}: Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately ΔT of 40°C

Rated DC Current: The less value which is I_{rms} or I_{sat}.

5. Typical Performance Curves

