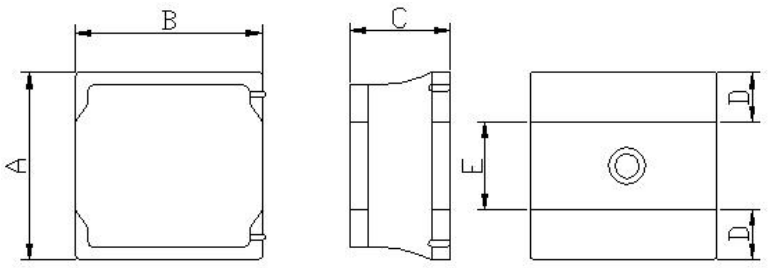
Power Inductor

HPC3012TF-SERIES

1. Features

1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
3. Operating temperature :-40~+125℃ (Including self - temperature rise)

2. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
HPC3012TF	3.0±0.2	3.0±0.2	1.2 max.	1.0 ref.	1.0 ref.

3. Part Numbering

HPC	3012	TF	-	4R7	M
A	B	C		D	E

A: Series
B: Dimension
C: Lead Free
D: Inductance 4R7=4.7uH
E: Inductance Tolerance M=±20% ； Y=±30%

4. Specification

TAI-TECH Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (Hz)	DCR (Ω)±20%	I sat (A) typ.	I sat (A) max.	I rms (A) typ	I rms (A) max.
HPC3012TF-1R0Y	1.0	±30%	0.1V/1M	0.042	2.50	2.15	2.20	2.00
HPC3012TF-1R5Y	1.5	±30%	0.1V/1M	0.056	2.00	1.70	2.00	1.85
HPC3012TF-2R2M	2.2	±20%	0.1V/1M	0.080	1.80	1.50	1.90	1.70
HPC3012TF-3R3M	3.3	±20%	0.1V/1M	0.100	1.50	1.20	1.70	1.55
HPC3012TF-4R7M	4.7	±20%	0.1V/1M	0.130	1.30	1.05	1.50	1.30
HPC3012TF-6R8M	6.8	±20%	0.1V/1M	0.180	1.20	0.90	1.20	1.05
HPC3012TF-100M	10	±20%	0.1V/1M	0.245	0.90	0.76	1.00	0.89
HPC3012TF-150M	15	±20%	0.1V/1M	0.386	0.80	0.62	0.90	0.74
HPC3012TF-220M	22	±20%	0.1V/1M	0.580	0.60	0.49	0.70	0.61

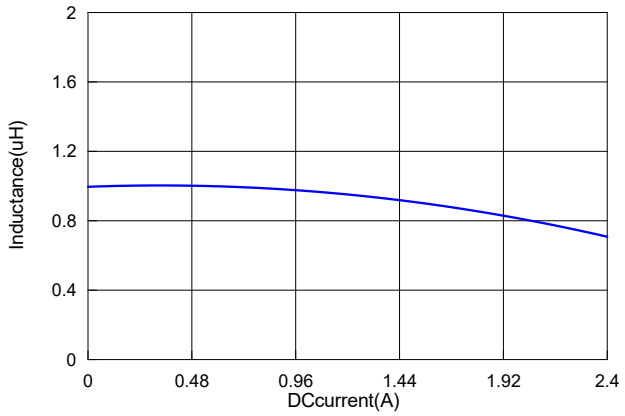
Note:

Isat： Saturation Current (Isat) will cause L0 to drop approximately 30%.

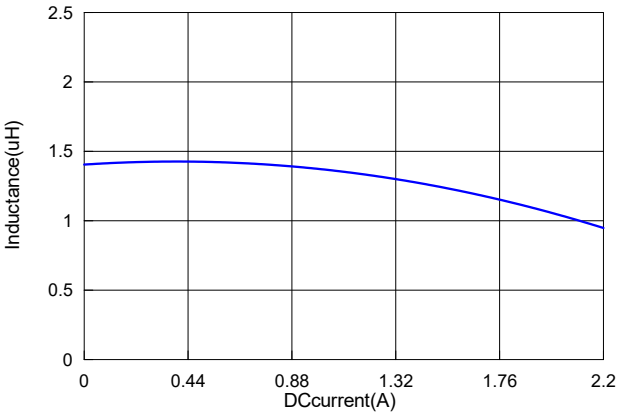
Irms： Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃

9.Typical Performance Curves

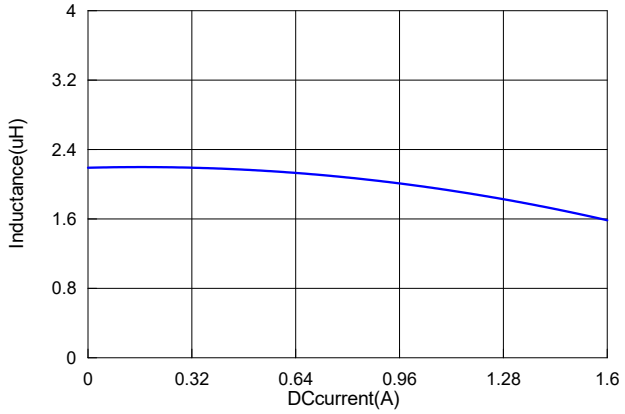
HPC3012TF-1R0



HPC3012TF-1R5



HPC3012TF-2R2



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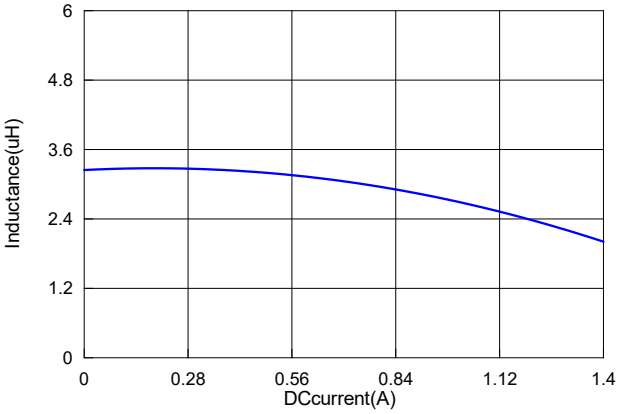
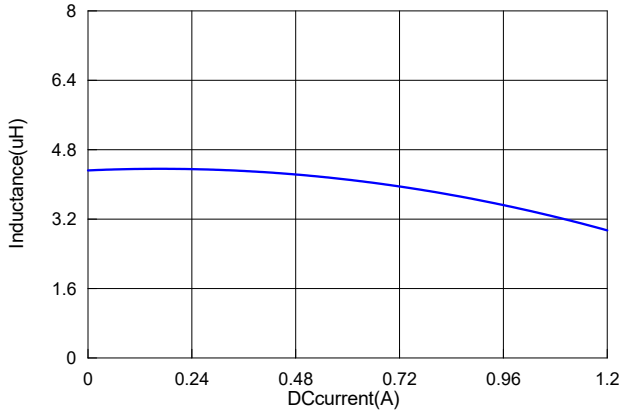


HPC3012TF-4R7



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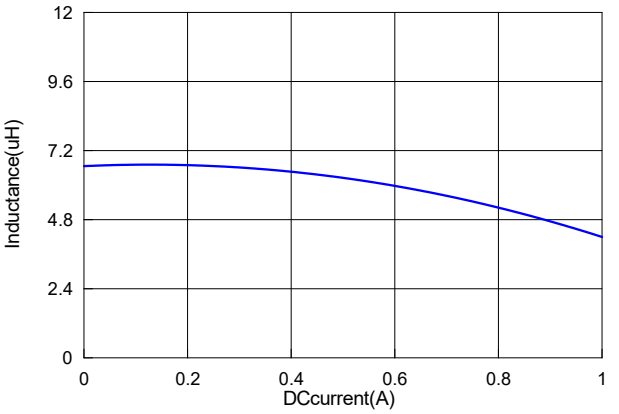
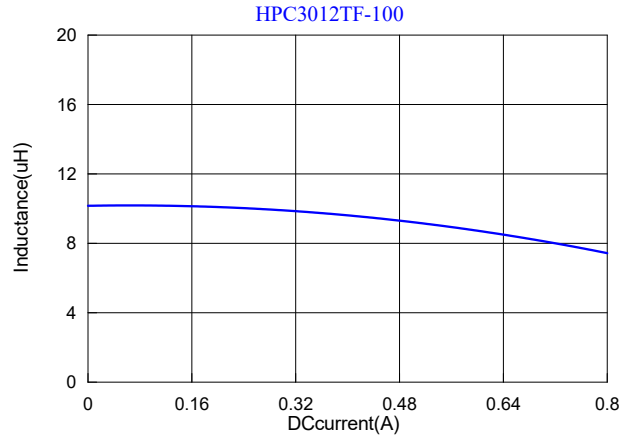
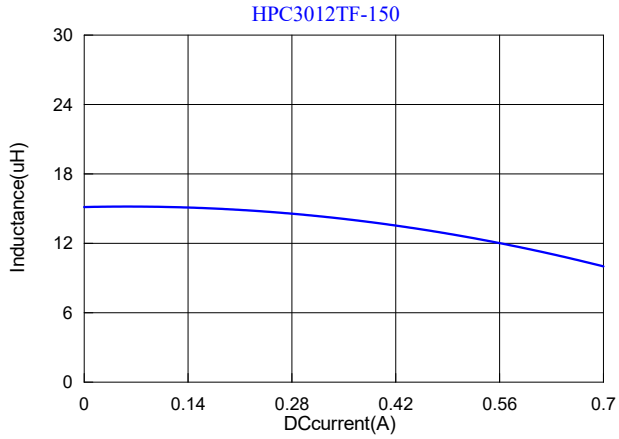


HPC3012TF-100



HPC3012TF-150



HPC3012TF-220

