

# Power Inductor

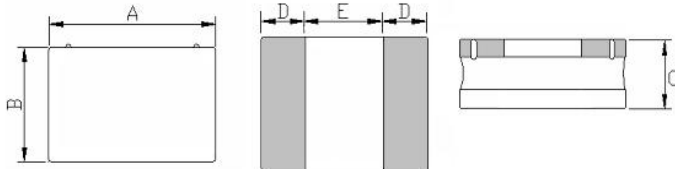
DFP252012TV-SERIES

## 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)

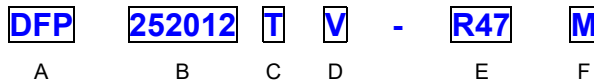


## 2. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
DFP252012TV	2.5 -0.1/+0.2	2.0 -0.05/+0.35	1.2Max	0.85±0.2	0.80±0.2

## 3. Part Numbering



- A: Series  
 B: Dimension  
 C: Lead Free  
 D: Category Code  
 E: Inductance  
 F: Inductance Tolerance
- Material  
 V=Vehicle  
 R47=0.47uH  
 M=±20%

## 4. Specification

TAI-TECH Part Number	Inductance (uH)	Tolerance (%)	Test Frequency (Hz)	DCR (Ω) typ.	DCR (Ω) Max.	I sat (A) typ.	I sat (A) Max.	I rms (A) typ	I rms (A)Max.
DFP252012TV-R24M	0.24	±20%	0.1V/1M	0.024	0.028	8.00	6.50	4.70	4.20
DFP252012TV-R33M	0.33	±20%	0.1V/1M	0.027	0.032	5.70	4.60	4.50	4.00
DFP252012TV-R47M	0.47	±20%	0.1V/1M	0.027	0.032	5.50	4.50	4.40	3.90
DFP252012TV-R68M	0.68	±20%	0.1V/1M	0.036	0.043	4.50	3.80	3.60	3.20
DFP252012TV-1R0M	1.00	±20%	0.1V/1M	0.045	0.057	3.90	3.40	3.50	3.15
DFP252012TV-1R5M	1.50	±20%	0.1V/1M	0.080	0.096	3.00	2.60	2.50	2.25
DFP252012TV-2R2M	2.20	±20%	0.1V/1M	0.085	0.102	2.70	2.30	2.30	2.00

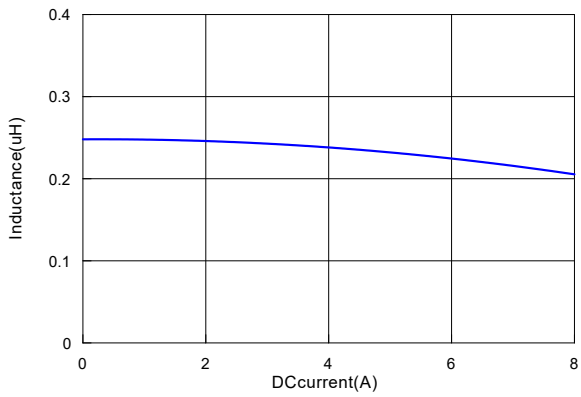
Note:

I<sub>sat</sub> : Saturation Current (I<sub>sat</sub>) will cause L<sub>0</sub> to drop approximately 30%.

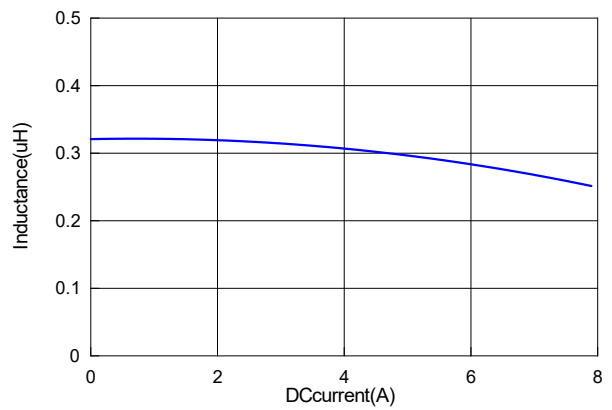
I<sub>rms</sub> Heat Rated Current (I<sub>rms</sub>) will cause the coil temperature rise approximately ΔT of 40°C

### 9. Typical Performance Curves

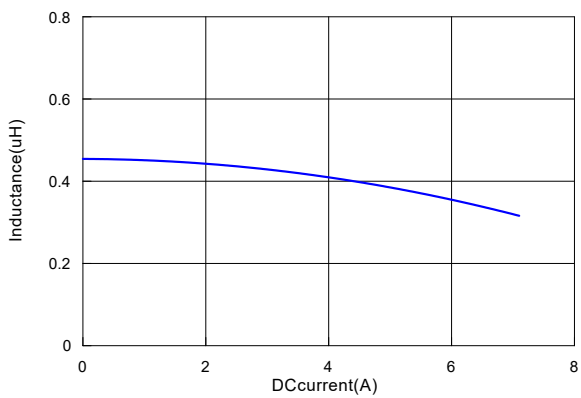
DFP252012TV-R24



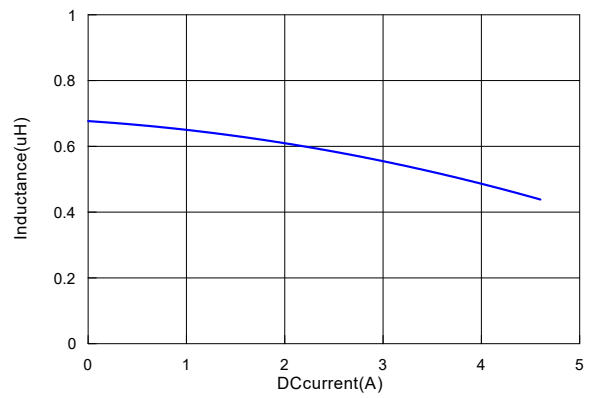
DFP252012TV-R33



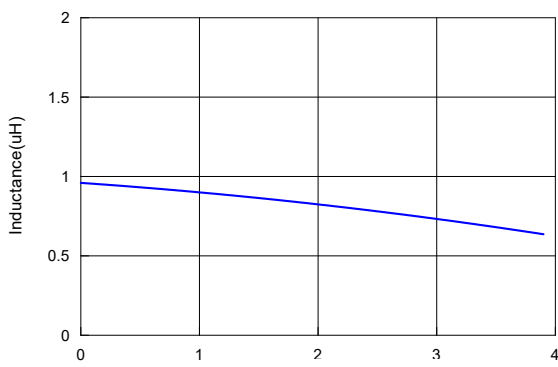
DFP252012TV-R47



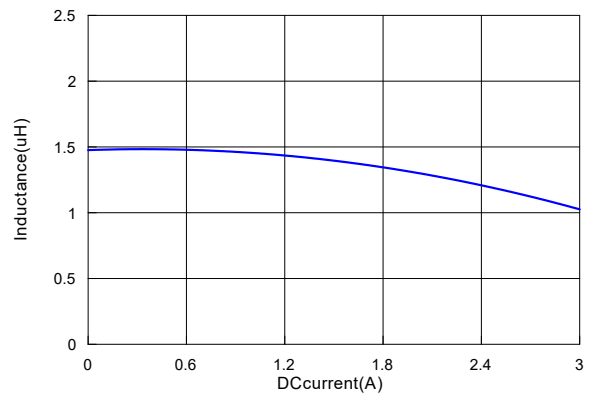
DFP252012TV-R68



DFP252012TV-1R0



DFP252012TV-1R5



DFP252012TV-2R2

