

PSpice Model

Multilayer Inductor

MURATA

DFE252012PD-4R7M



Model Information

Model	An original macro model		
Call Name	MDC_DFE252012PD-4R7M_PS		
Pin Assign	1:1 2:2		
File List	Model Library	MDC_DFE252012PD-4R7M_PS01.lib	
	Model Report	MDC_DFE252012PD-4R7M_PS.pdf (this file)	
Verified Simulator Version	PSpice version 17.2		
Note			

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 2023/09/30
- Product name DFE252012PD-4R7M
- Company name Murata Manufacturing Co., Ltd.
- Characteristics InductanceI[f[Temp],InductanceFreq[Vf],ImpedanceFreq[Vf], QfactorFreq[Vf],ResistanceVf[Temp]

Simulation Range

This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Temperature	-40	to	125	deg C

Inductor

○ : Implemented
 × : Not Implemented
 — : Not applicable

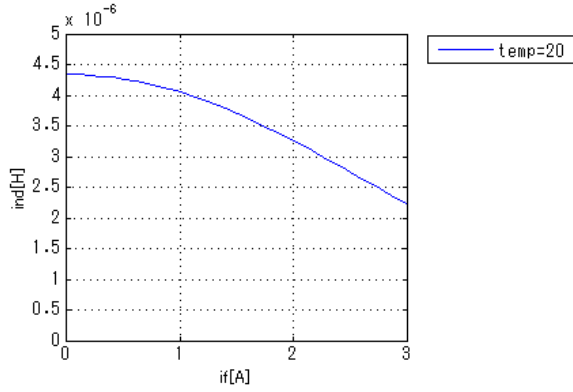
Model Functions Table
RANK=1

Functions	RANK	Implemented
Impedance-Frequency	1	○
Inductance-Frequency	1	○
Inductance-Current	1	○
Inductance-Temp	1	—
Resistance-Voltage	1	○
Qfactor-Frequency	1	○

Simulation results are following.
 Explanatory notes — : simulated

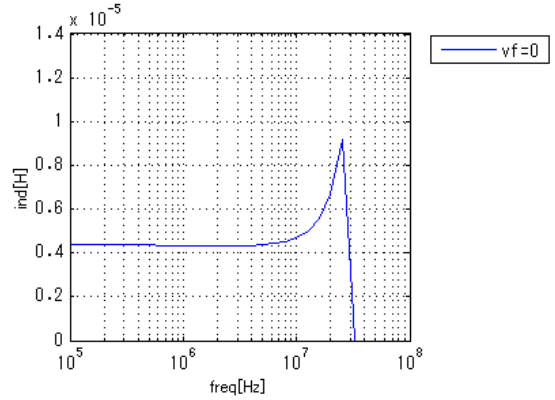
InductanceI[Temp]

freq = 1000000Hz



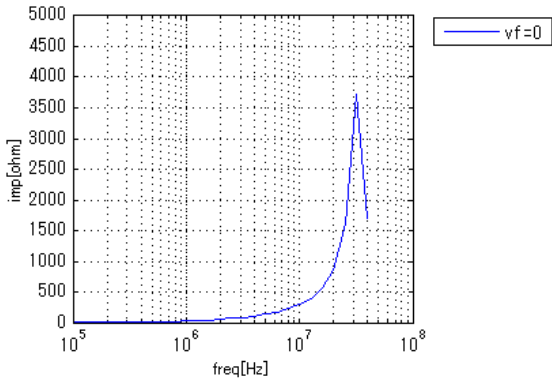
InductanceFreq[Vf]

temp = 20degC



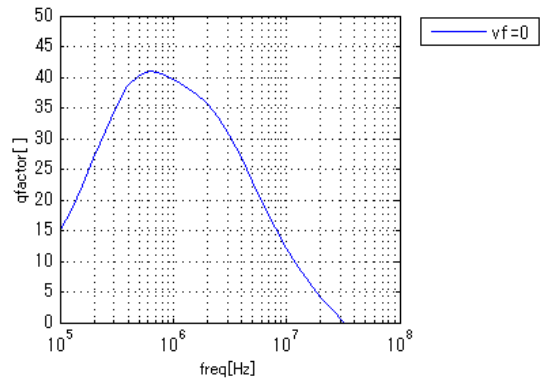
ImpedanceFreq[Vf]

temp = 20degC

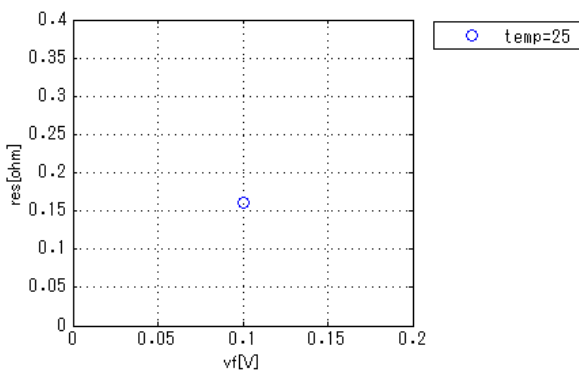


QfactorFreq[Vf]

Temp = 25degC



ResistanceVf[Temp]



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