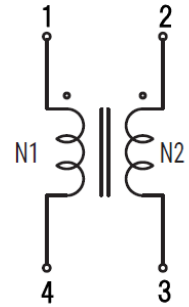
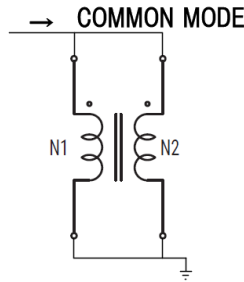


ADS Model

Wound Inductor

TOKIN

SC-18-E15J



Model Information

Model An original macro model
Call Name MDC_SC-18-E15J_AD02
Pin Assign 1:N1 2:N2 3:N2 4:N1
File List Model Library MDC_SC_18_E15J_AD.zip
 Model Report MDC_SC-18-E15J_AD02.pdf (this file)

Verified Simulator Version ADS 2023
Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 10/14/2019
- Product name SC-18-E15J
- Company name TOKIN Corporation
- Characteristics ImpedanceFreq[Vr],InductanceFreq[Vr],InductanceIrl[Temp],InductanceTemp[Ir],ResistanceIrl[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	-55	to	150	deg C

Inductor

○ : Implemented
 × : Not Implemented
 — : Not applicable

Model Functions Table

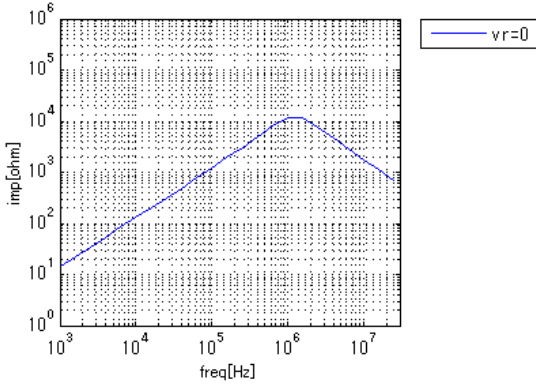
RANK=1

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

Simulation results are following.
 Explanatory notes — : simulated

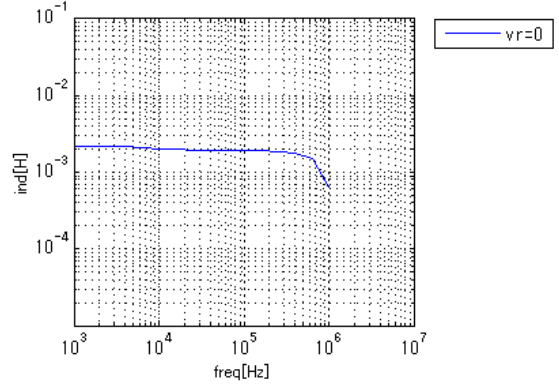
ImpedanceFreq[Vr]

temp = 25degC



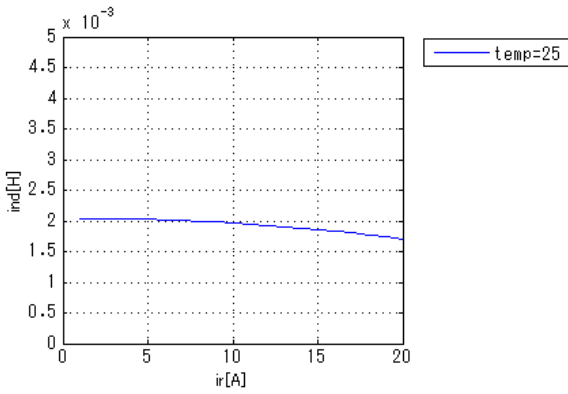
InductanceFreq[Vr]

temp = 25degC



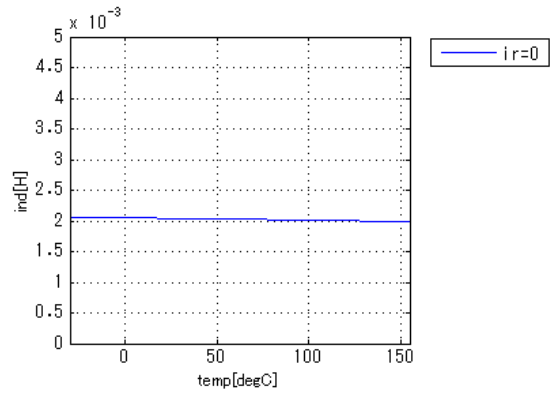
InductanceIr[Temp]

freq = 10000Hz

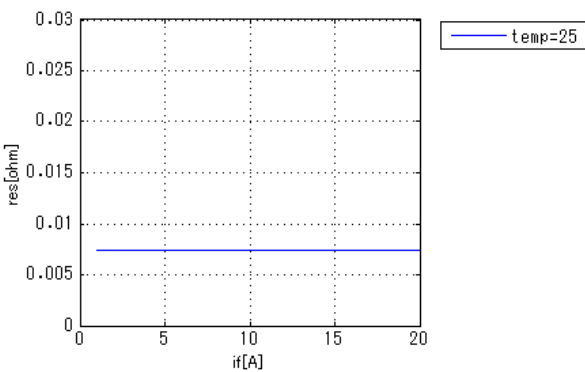


InductanceTemp[Ir]

freq = 10000Hz



Resistancelf[Temp]



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