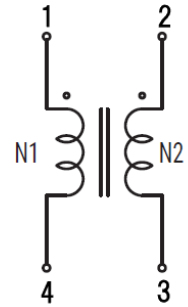
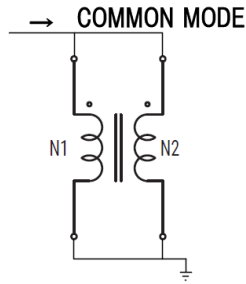


# PSpice Model Wound Inductor TOKIN SC-18-E15J



## Model Information

**Model** An original macro model  
**Call Name** MDC\_SC-18-E15J\_PS  
**Pin Assign** N1 2:N2 3:N2 4:N1  
**File List** Model Library MDC\_SC-18-E15J\_PS01.lib  
 Model Report MDC\_SC-18-E15J\_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 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

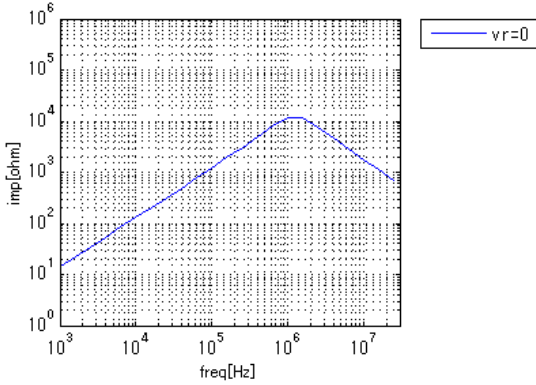
**Model Functions Table**
**RANK=1**

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

Simulation results are following.  
 Explanatory notes — : simulated

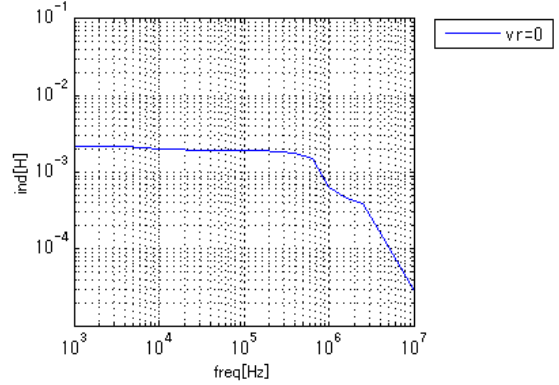
**ImpedanceFreq[Vr]**

temp = 25degC



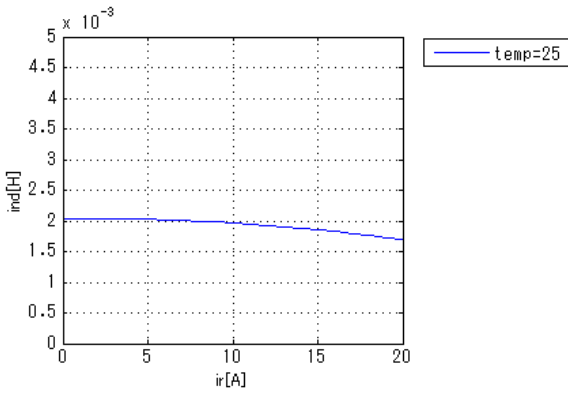
**InductanceFreq[Vr]**

temp = 25degC



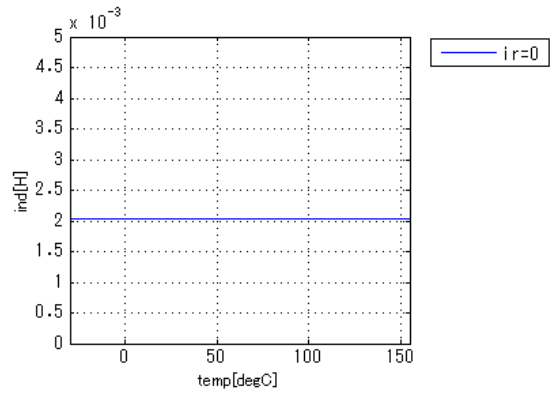
**InductanceIr[Temp]**

freq = 10000Hz

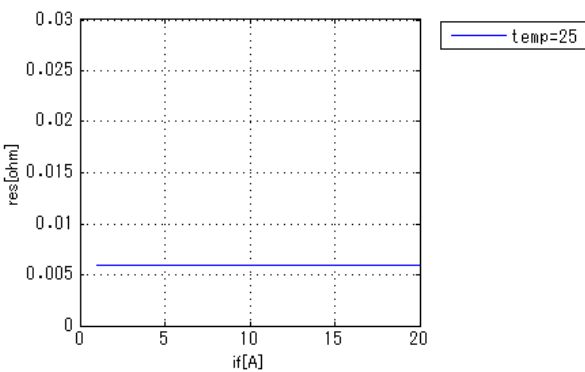


**InductanceTemp[Ir]**

freq = 10000Hz



**Resistancelf[Temp]**



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