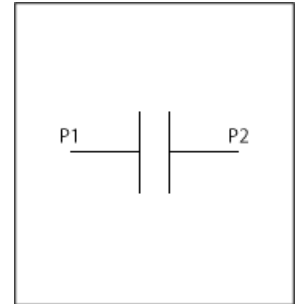


LTspice Model

Film Capacitor

NISSEI

MPEC1250J1030B59P045



Model Information

Model An original macro model
Call Name MDC_MPEC1250J1030B59P045_LT
Pin Assign 1:P1 2:P2
File List Model Library MDC_MPEC1250J1030B59P045_LT01.lib
 Model Report MDC_MPEC1250J1030B59P045_LT.pdf (this file)

Verified Simulator Version LTspice version XVII
Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 20.05.20
- Product name MPEC1250J1030B59P045
- Company name NISSEI Electric Co., Ltd.
- Characteristics CapVf, CapTemp[Vf], CapVac, ImpedanceFreq[Vf], ESRFreq[Vf], InductanceFreq[Vf], CapFreq[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	105	deg C

Capacitor

○ : Implemented
× : Not Implemented
— : Not applicable

Model Functions Table

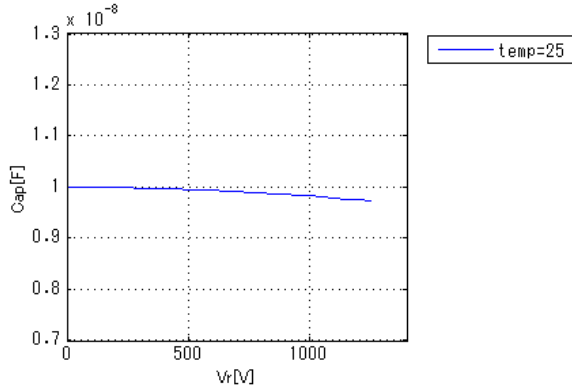
RANK=1

Functions	RANK	Implemented
Impedance-Frequency	1	○
ESR-Frequecy	1	○
Capacitance-Frequency	1	○
Inductance-Frequency	1	○
Capacitance-Voltage	1	○
Capacitance-Temp	1	○
Capacitance-Vac	1	○
Resistance-Voltage	1	○

Simulation results are following.
 Explanatory notes — : simulated

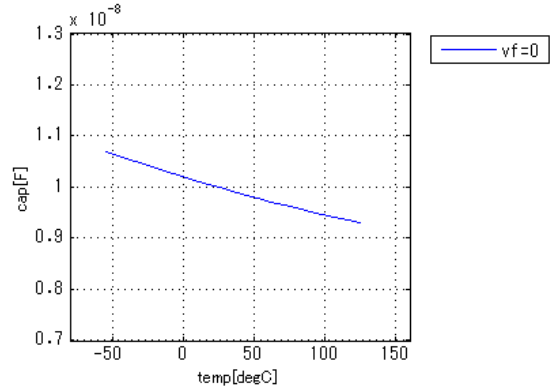
CapVf

Freq = 1000Hz



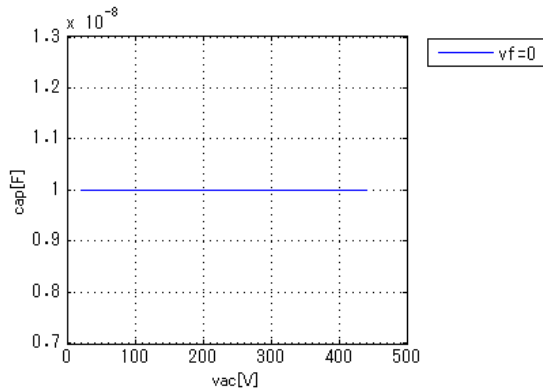
CapTemp[Vf]

Freq = 1000Hz



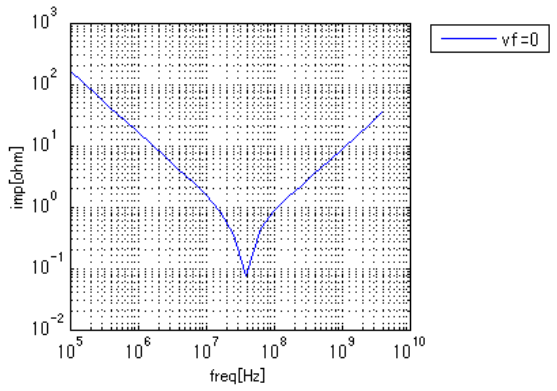
CapVac

Freq = 1000Hz, VF = 0V



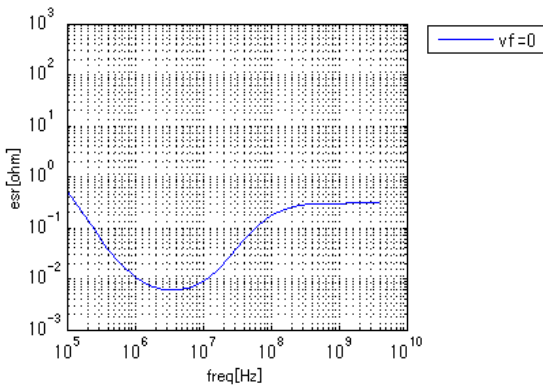
ImpedanceFreq[Vf]

temp = 25degC



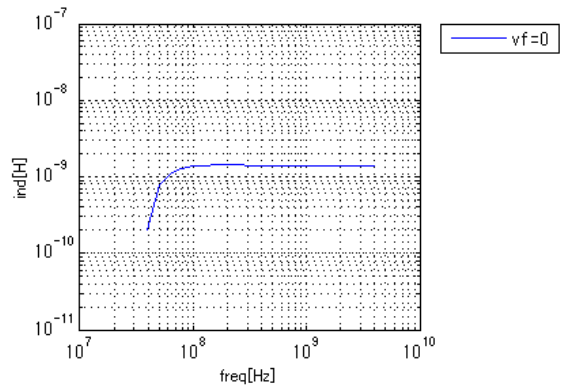
ESRFreq[Vf]

temp = 25degC



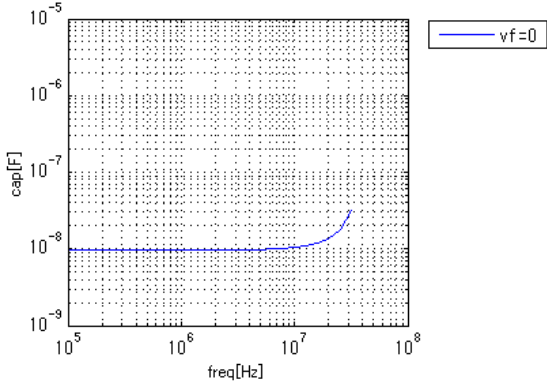
InductanceFreq[Vf]

temp = 25degC

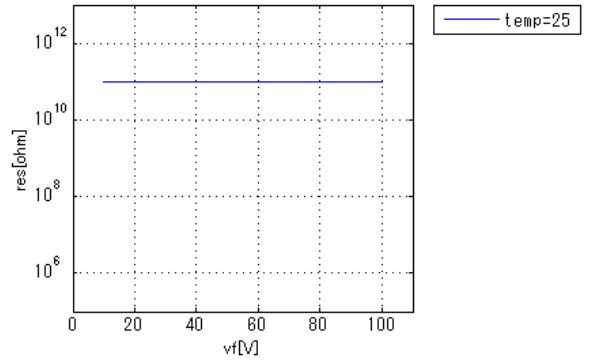


Simulation results are following.
 Explanatory notes — : simulated

CapFreq[Vf]



ResistanceVf[Temp]



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