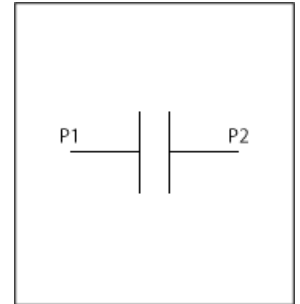


PSpice Model

Ceramic Capacitor

SAMSUNG

CL10B104KB8NNN



Model Information

Model An original macro model
Call Name MDC_CL10B104KB8NNN_PS
Pin Assign 1:P1 2:P2
File List Model Library MDC_CL10B104KB8NNN_PS01.lib
 Model Report MDC_CL10B104KB8NNN_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 2023/08/03
- Product name CL10B104KB8NNN
- Company name SAMSUNG ELECTRO-MECHANICS,
- Characteristics CapVf[Freq],CapTemp[Vf],CapTemp[Vf]2,CapVac[Freq],Imp edanceFreq[Vf],ESRFreq[Vf],CapFreq[Vf]

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	125	deg C

Capacitor

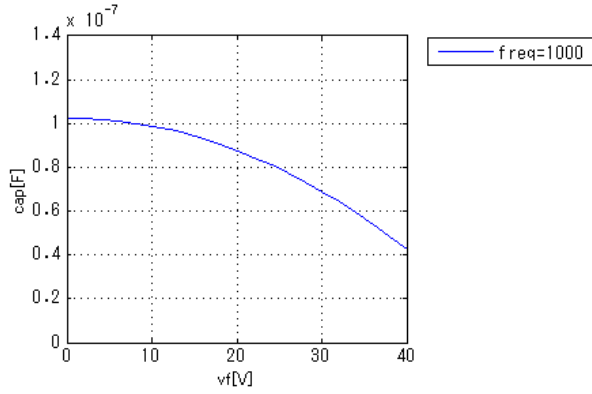
○ : Implemented
 × : Not Implemented
 — : Not applicable

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	—

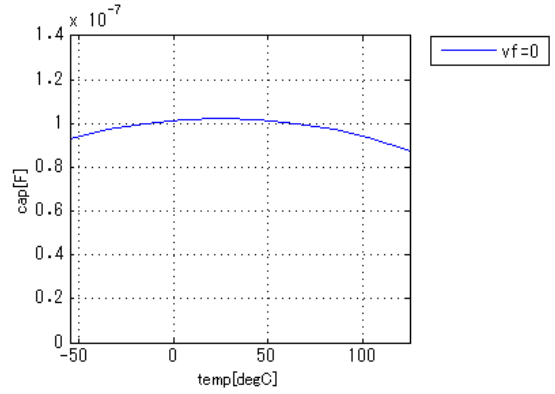
Simulation results are following.
 Explanatory notes — : simulated

CapVf[Freq]



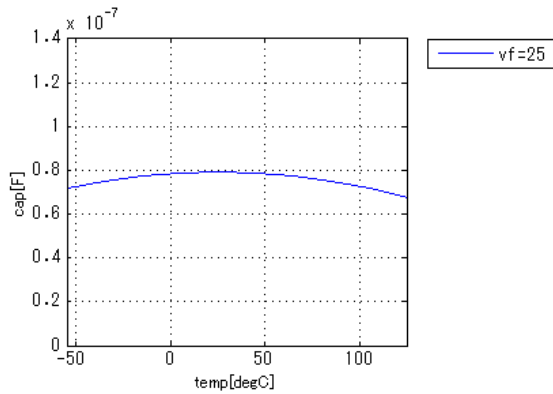
CapTemp[Vf]

Freq = 1000Hz



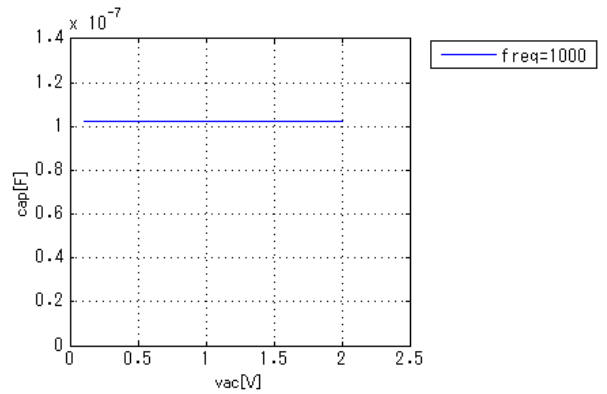
CapTemp[Vf]2

Freq = 1000Hz



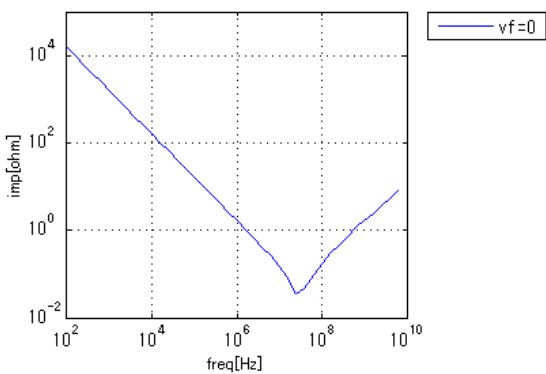
CapVac[Freq]

Vf = 0V



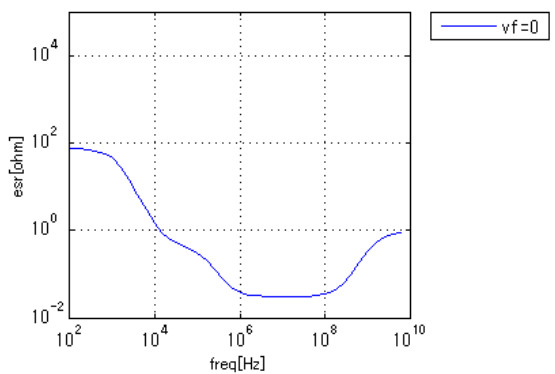
ImpedanceFreq[Vf]

temp = 25degC



ESRFreq[Vf]

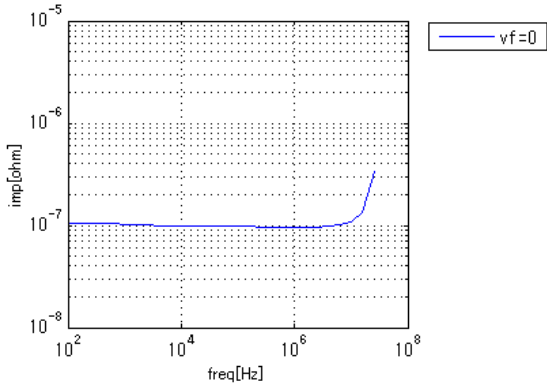
temp = 25degC



Simulation results are following.
Explanatory notes — : simulated

CapFreq[Vf]

Temp = 25degC



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