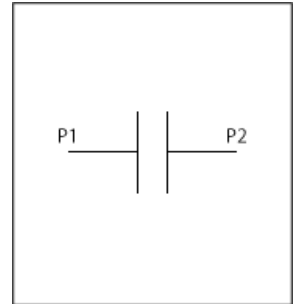


LTspice Model

Ceramic Capacitor

MURATA

GRM188B31H104KA92D



Model Information

Model An original macro model
Call Name MDC_GRM188B31H104KA92D_LT
Pin Assign 1:P1 2:P2
File List Model Library MDC_GRM188B31H104KA92D_LT01.lib
 Model Report MDC_GRM188B31H104KA92D_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 2023/07
- Product name GRM188B31H104KA92D
- Company name Murata Manufacturing Co., Ltd.
- Characteristics CapVf, CapTemp[Vf], CapVac, ImpedanceFreq[Vf], ESRFreq[Vf], InductanceFreq[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	-25	to	85	deg C

Capacitor

○ : Implemented
 × : Not Implemented
 — : Not applicable

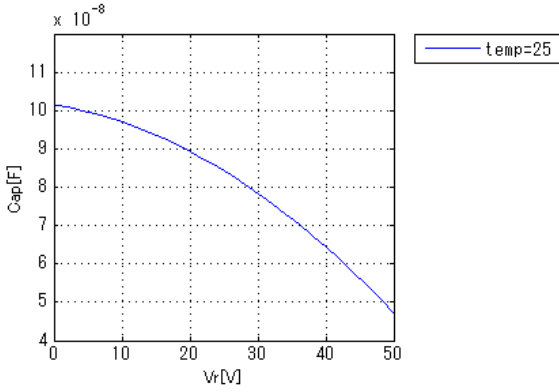
Model Functions Table
RANK=1

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

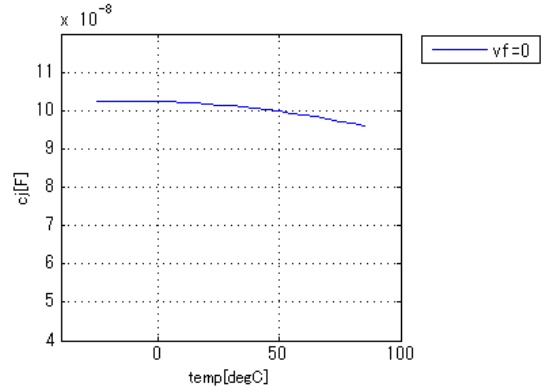
CapVf

Freq = 1000Hz



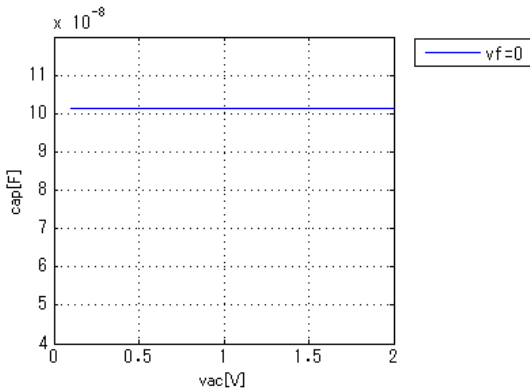
CapTemp[Vf]

Freq = 1000Hz



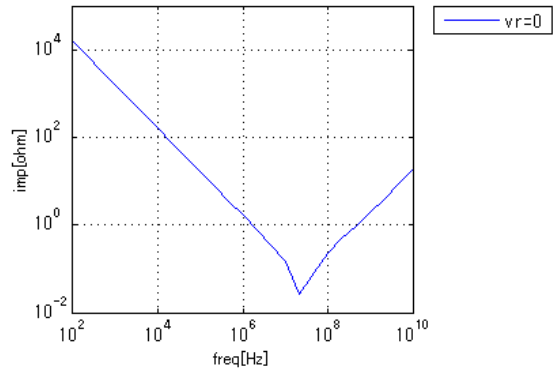
CapVac

Freq = 1000Hz, VF = 0V



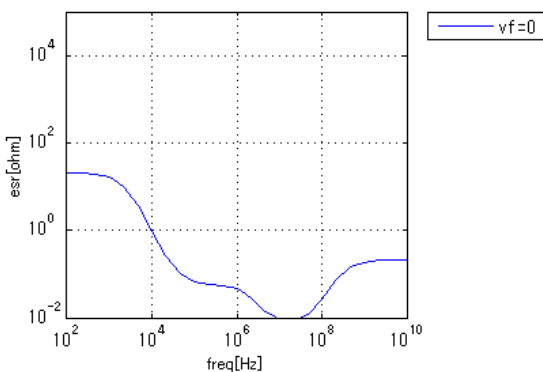
ImpedanceFreq[Vf]

temp = 25degC



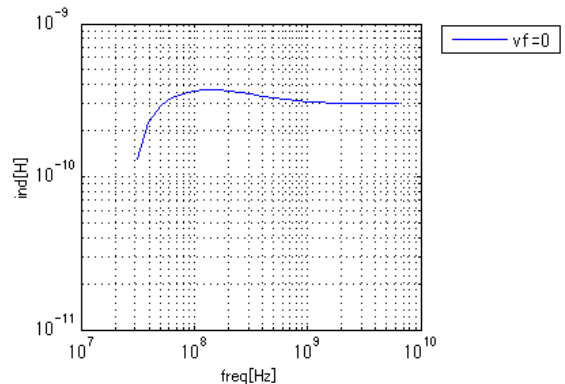
ESRFreq[Vf]

temp = 25degC



InductanceFreq[Vf]

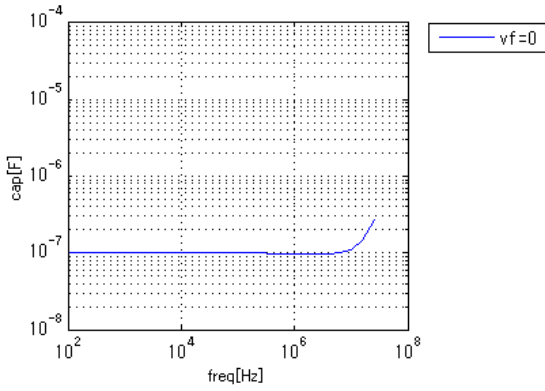
temp = 25degC



Simulation results are following.

Explanatory notes — : simulated

CapFreq[Vf]



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