#### MDC\_CL10B104KB8NNN\_LT

## LTspice Model Ceramic Capacitor SAMSUNG CL10B104KB8NNN

### **Model Information**

 Model
 An original macro model

 Call Name
 MDC\_CL10B104KB8NNN\_LT

 Pin Assign
 1:P1 2:P2

 File List
 Model Library
 MDC\_CL10B104KB8NNN\_LT01.lib

 Model Report
 MDC\_CL10B104KB8NNN\_LT.pdf (this file)

Verified Simulator Version Note

LTspice version XVII

#### References

The information which was used for modeling is as follow:

 [Data Sheet]

 Date/Version
 Product name
 Company name
 Characteristics

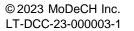
 2023/08/03

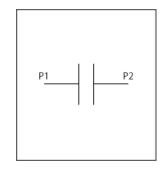
 CL10B104KB8NNN
 SAMSUNG ELECTRO-MECHANICS,
 CapVf[Freq],CapTemp[Vf],CapTemp[Vf]2,CapVac[Freq],Imp edanceFreq[Vf],ESRFreq[Vf],CapFreq[Vf]

#### 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





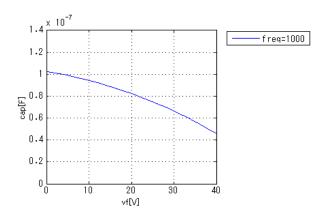
# Modech

Capacitor		O : Implemented × : Not Implemented	
Model Functions Table	-: Not applicable		
Functions	RANK	Implemented	
Impedance-Frequency	1	0	
ESR-Frequecy	1	0	
Capacitance-Frequency	1	0	
Inductance-Frequency	1	—	
Capacitance-Voltage	1	0	
Capacitance-Temp	1	0	
Capacitance-Vac	1	0	
Resistance-Voltage	1	—	



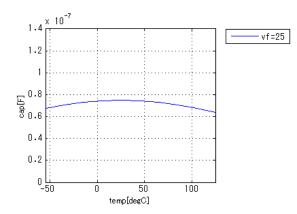
# Simulation results are following. Explanatory notes -: simulated

### CapVf[Freq]



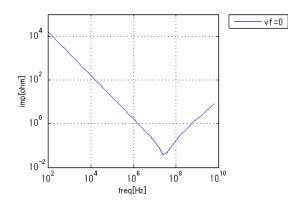
#### CapTemp[Vf]2

Freq = 1000Hz



#### ImpedanceFreq[Vf]

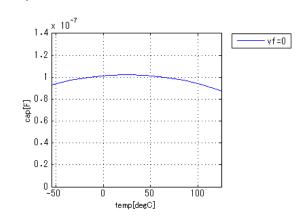
temp = 25degC



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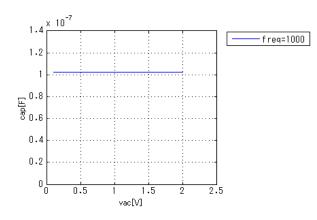
#### CapTemp[Vf]

Freq = 1000Hz

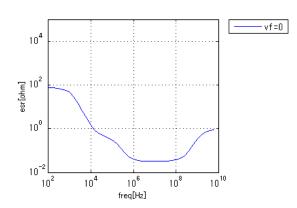


#### CapVac[Freq]

Vf = 0V



ESRFreq[Vf] temp = 25degC



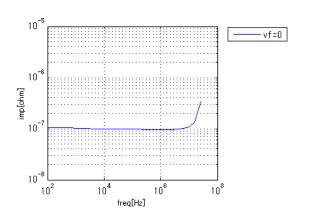
August 30, 2023 Rev. 1.0



# Simulation results are following. Explanatory notes -: simulated

### CapFreq[Vf]

Temp = 25degC





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MoDeCH Inc.

Head Office Location: 5-15 Yokoyama-cho, Hachioji-Shi, Tokyo 192-0081, Japan Tel:+81-42-656-3360 E-Mail:model-on-support@modech.co.jp URL:http://www.modech.com/en/