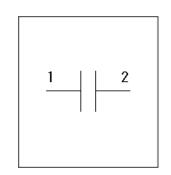


# ADS Model Ceramic Capacitor MURATA DE2E3SA102MN3AT02F



### **Model Information**

Model An original macro model

Call Name MDC DE2E3SA102MN3AT02F AD

Pin Assign 1:1 2:2

File List Model Library MDC\_DE2E3SA102MN3AT02F\_AD01.lib

Model Report MDC\_DE2E3SA102MN3AT02F\_AD.pdf (this file)

Verified Simulator Version

Note

ADS version 2016

#### References

The information which was used for modeling is as follow:

[Data Sheet]

Date/Version Unknown

Product nameDE2E3SA102MN3AT02FCompany nameMurata Manufacturing Co., Ltd.

Characteristics CapVf[Freq],CapTemp[Vf],CapVac[Freq],CapFreq[Vf],Imped

anceFreq[Vf],ESRFreq[Vf],InductanceFreq[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



**Model Functions Table** 

# Capacitor

O:Implemented

×: Not Implemented

—: Not applicable

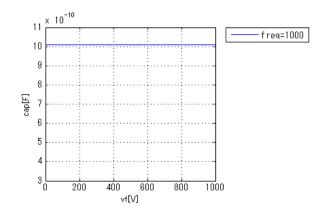
# RANK=1

	IVAIVIC-1	
Functions	RANK	Implemented
Impedance-Frequency	1	0
ESR-Frequecy	1	0
Capacitance-Frequency	1	0
Inductance-Frequency	1	0
Capacitance-Voltage	1	0
Capacitance-Temparature	1	0



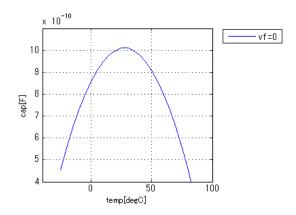
Simulation results are following. Explanatory notes — : simulated

## CapVf[Freq]



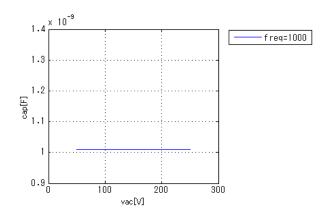
## CapTemp[Vf]

Freq = 1000Hz



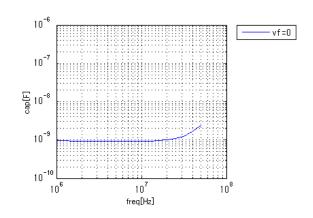
#### CapVac[Freq]

Vf = 0V



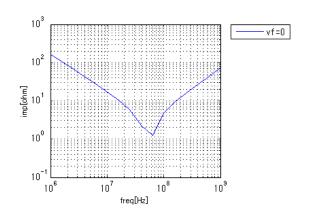
### CapFreq[Vf]

Temp = 25degC



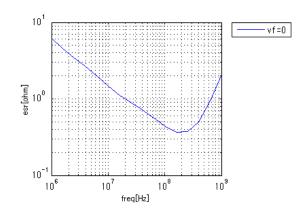
#### ImpedanceFreq[Vf]

temp = 25degC



### ESRFreq[Vf]

temp = 25degC

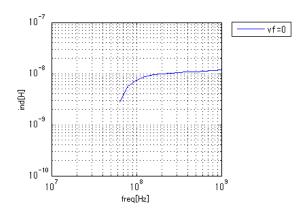




Simulation results are following. Explanatory notes — : simulated

## InductanceFreq[Vf]

temp = 25degC





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