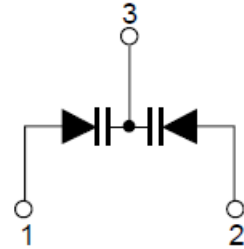


LTspice Model

Variable Capacitance Diode

TOKO

KV1400



Model Information

Model A macro model based on general SPICE diode model
Call Name MDC_KV1400_LT
Pin Assign 1:A1 2:A2 3:C(both)
File List Model Library MDC_KV1400_LT01.lib
 Model Report MDC_KV1400_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 January 2000
- Product name KV1400
- Company name TOKO, INC.
- Characteristics CjVr,IrVr[Temp],QfactorVr[Freq],ESRFreq[Vr],NormCjVr[Temp],DiffCjVr[Freq]

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.	
Reverse Voltage (DC)	0	to	18	V
Temperature	-55	to	150	deg C

Variable Capacitor

○ : Implemented
× : Not Implemented
— : Not applicable

Model Functions Table

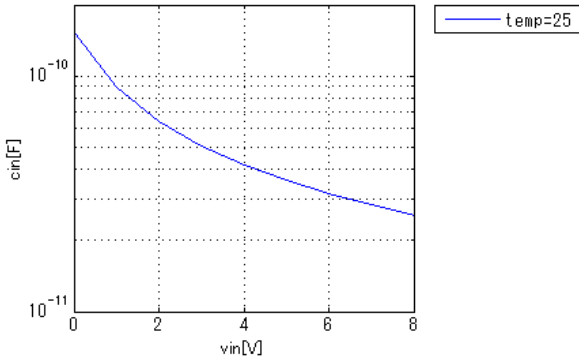
RANK=1

Functions	RANK	Implemented
IF-VF(Temp)	1	—
IR-VR(Temp)	1	○
Capacitanc-VR	1	○
Qfactor-Frequency	1-	○
ESR-Frequency	1	○
Capacitance-Temp	1	○

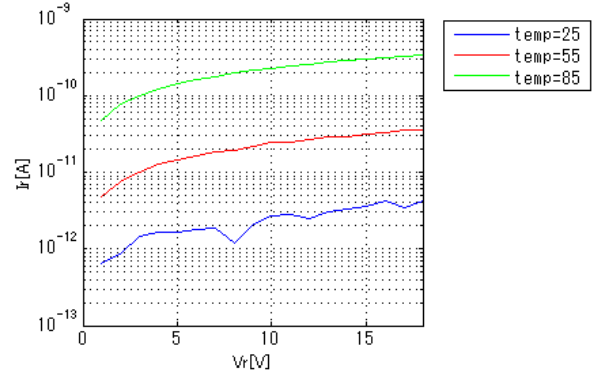
Simulation results are following.
 Explanatory notes — : simulated

CjVr

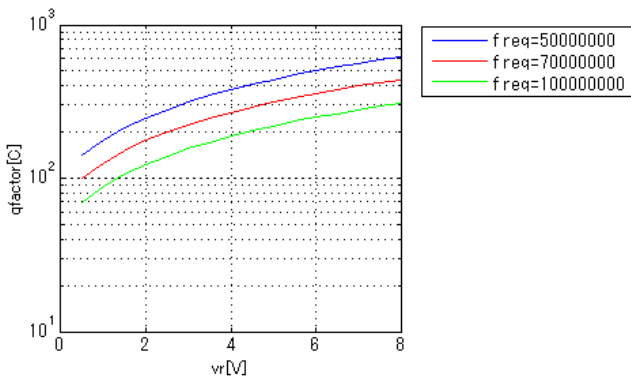
Freq = 1000000Hz



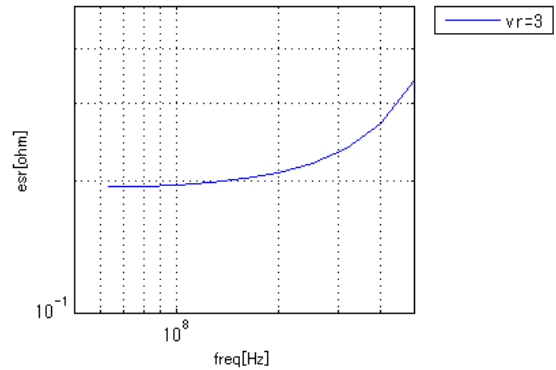
IrVr[Temp]



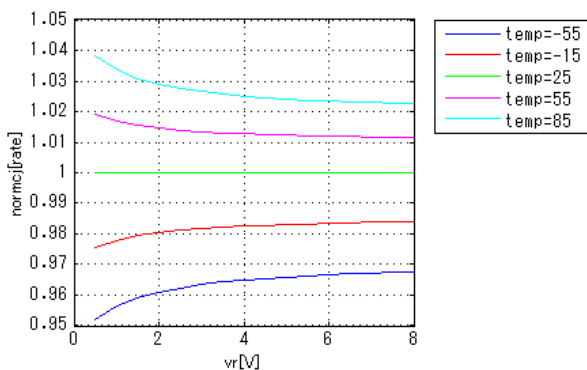
QfactorVr[Freq]



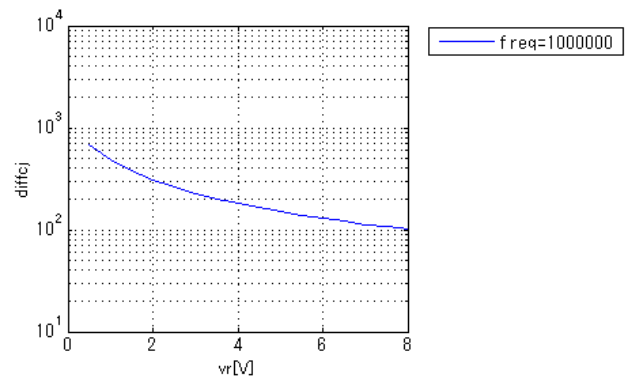
ESRFreq[Vr]



NormCjVr[Temp]



DiffCjVr[Freq]



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