

ADS Model

Zener Diode

ROHM

UDZV22B



Model Information

Model A macro model based on general SPICE diode model
Call Name MDC_UDZV22B_AD
Pin Assign 1:C 2:A
File List Model Library MDC_UDZV22B_AD01.lib
 Model Report MDC_UDZV22B_AD.pdf (this file)

Verified Simulator Version ADS version 2016
Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 2021/01/08_Rev.005
- Product name UDZV22B
- Company name ROHM Co., Ltd.
- Characteristics VrIr[Temp], VrIr[Temp]2, IrVr[Temp], CjVr, ZzIz, IfVf[Temp]

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.	
Zener Voltage (at 5mA)	21.54	to	22.47	V
Temperature	-55	to	150	deg C

Diode

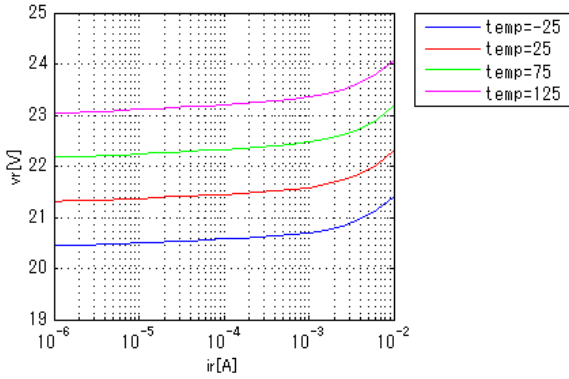
○ : Implemented
× : Not Implemented
— : Not applicable

Model Functions Table
RANK=1

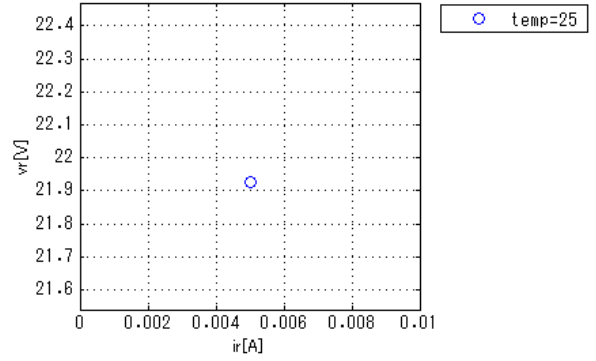
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	—
Zz-Iz	1	○
Rectification characteristics(Bridge)	1	—
Surge-Transient	1	—
tlp	1	—

Simulation results are following.
 Explanatory notes — : simulated

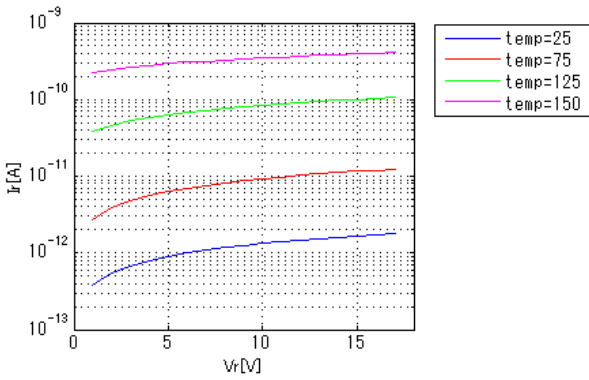
VrIr[Temp]



VrIr[Temp]2

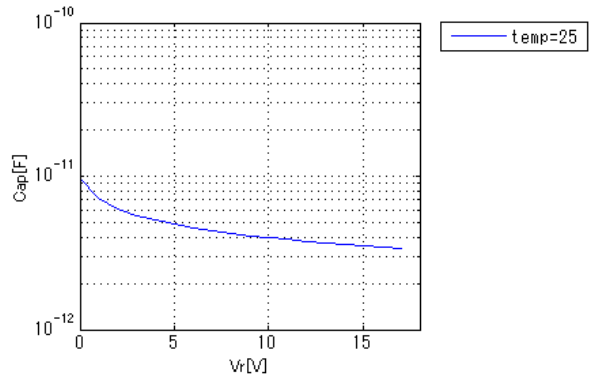


IrVr[Temp]



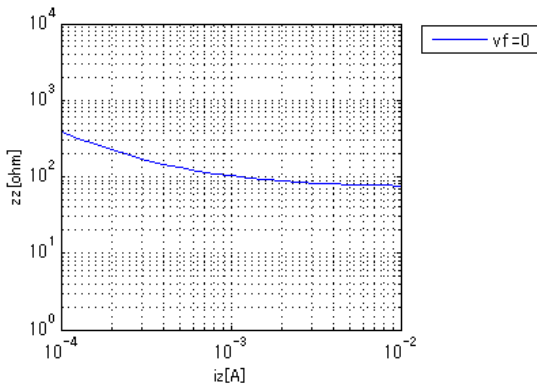
CjVr

Freq = 1000000Hz

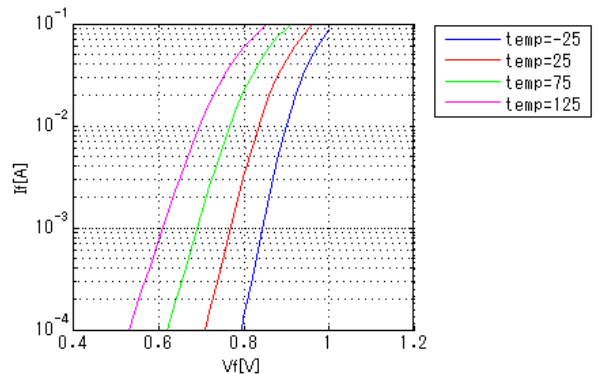


ZzIz

izl = 0.9, izh = 1.1



IfVf[Temp]



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