

LTspice Model

Zener Diode

ROHM

UDZS9.1B



Model Information

Model A macro model based on general SPICE diode model
Call Name MDC_UDZS9_1B_LT
Pin Assign 1:C 2:A
File List Model Library MDC_UDZS9_1B_LT01.lib
 Model Report MDC_UDZS9_1B_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 2012.02 - Rev.D
- Product name UDZS9.1B
- Company name ROHM Co., Ltd.
- Characteristics VrI_r[Temp],I_rV_r[Temp],C_jV_r,ZzI_z

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)	9	to	9	V
Temperature	-55	to	150	deg C

Diode

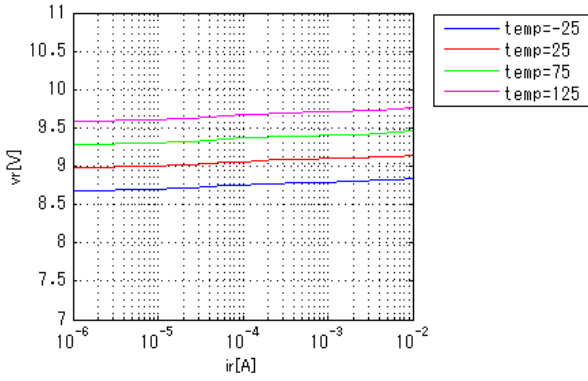
○ : Implemented
× : Not Implemented
— : Not applicable

Model Functions Table
RANK=1

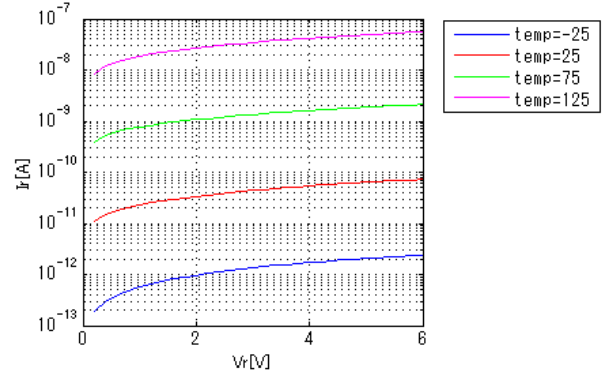
Functions	RANK	Implemented
IF-VF(Temp)	1	—
IR-VR(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	—
Zz-Iz	1	○
Rectification characteristics(Bridge)	1	—
Surge voltage-Transient	1	—

Simulation results are following.
 Explanatory notes — : simulated

VrIr[Temp]

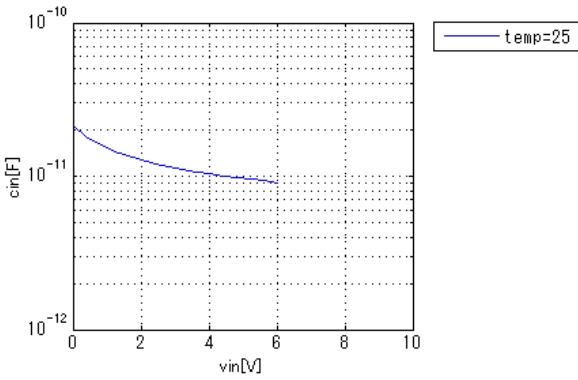


IrVr[Temp]



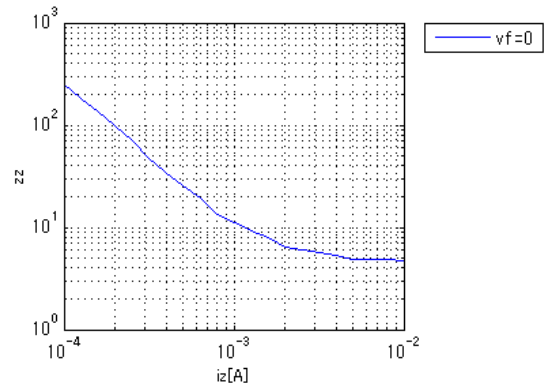
CjVr

Freq = 1000000Hz



ZzIz

$izl = 0.885377$, $izh = 1.1146236$



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