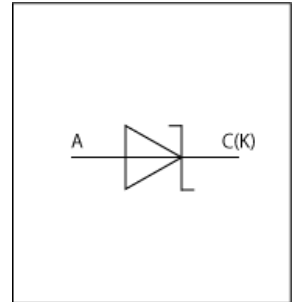


# PSpice Model

## Zener Diode

### ROHM

### UDZV22B



### Model Information

**Model** A macro model based on general SPICE diode model  
**Call Name** MDC\_UDZV22B\_PS  
**Pin Assign** 1:C 2:A  
**File List** Model Library MDC\_UDZV22B\_PS01.lib  
 Model Report MDC\_UDZV22B\_PS.pdf (this file)

**Verified Simulator Version** PSpice version 17.2  
**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 VrI<sub>r</sub>[Temp], VrI<sub>r</sub>[Temp]<sup>2</sup>, IrV<sub>r</sub>[Temp], C<sub>j</sub>V<sub>r</sub>, ZzI<sub>z</sub>, I<sub>f</sub>V<sub>f</sub>[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

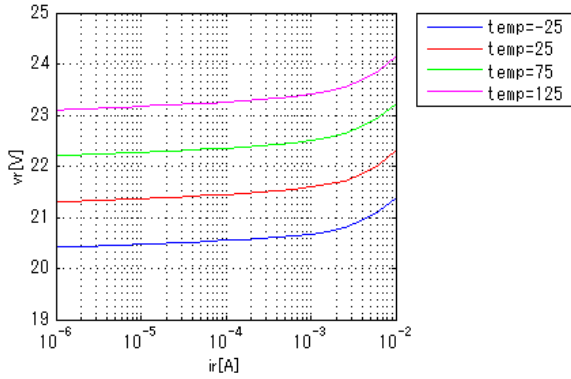
○ : Implemented  
× : Not Implemented  
— : Not applicable

**Model Functions Table**
**RANK=1**

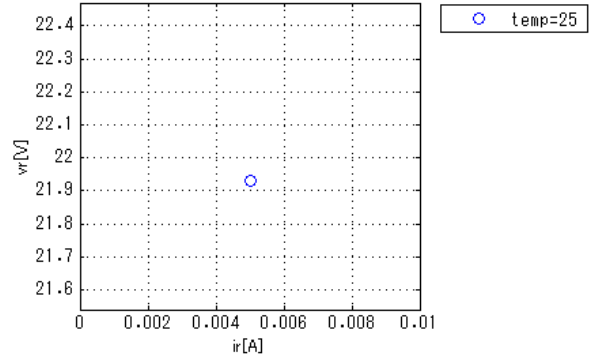
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	—
Zz-Iz	1	○
Rectification characteristics(Bridge)	1	—
Surge-Transient	1	—
tlp	1	—

Simulation results are following.  
 Explanatory notes — : simulated

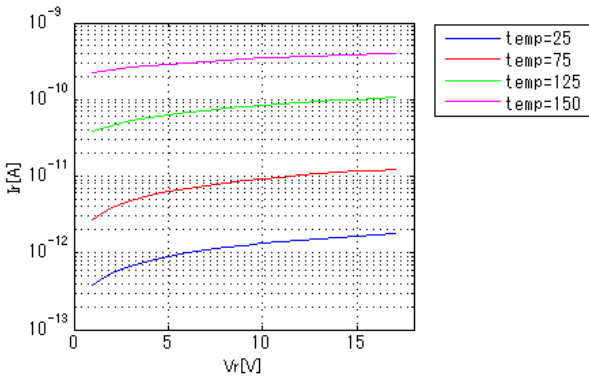
**VrIr[Temp]**



**VrIr[Temp]2**

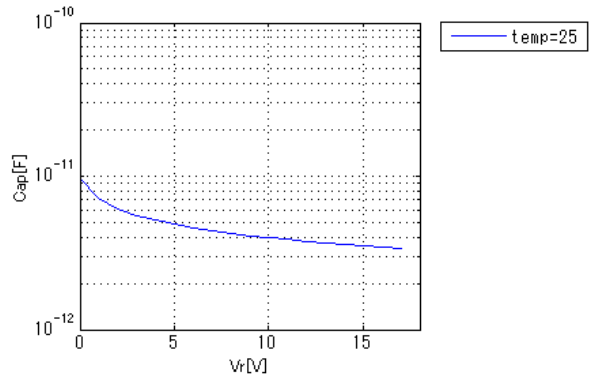


**IrVr[Temp]**



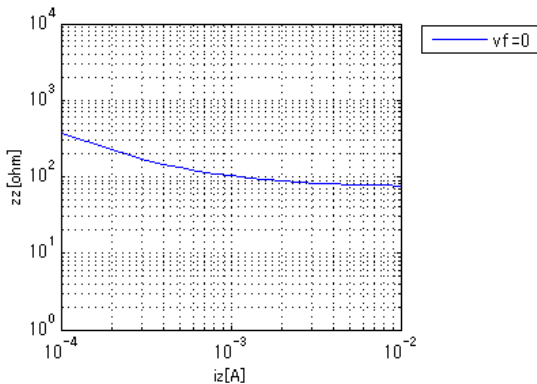
**CjVr**

Freq = 1000000Hz

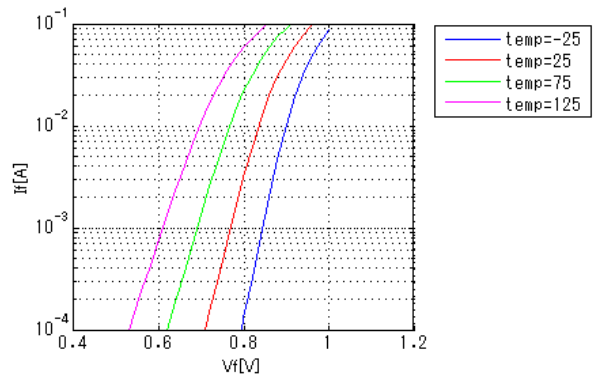


**ZzIz**

izl = 0.9, izh = 1.1



**IfVf[Temp]**



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