

# ADS Model

## Zener Diode

### ROHM

### UDZS9.1B



### Model Information

**Model** A macro model based on general SPICE diode model  
**Call Name** MDC\_UDZS9\_1B\_AD  
**Pin Assign** 1:C 2:A  
**File List** Model Library MDC\_UDZS9\_1B\_AD.zip  
 Model Report MDC\_UDZS9\_1B\_AD.pdf (this file)

**Verified Simulator Version** ADS version 2020 Update 2  
**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 VrIr[Temp],IrVr[Temp],CjVr,Zzlz

### 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

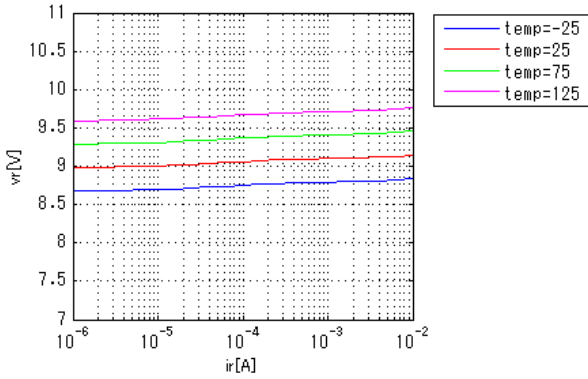
○ : Implemented  
× : Not Implemented  
— : Not applicable

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

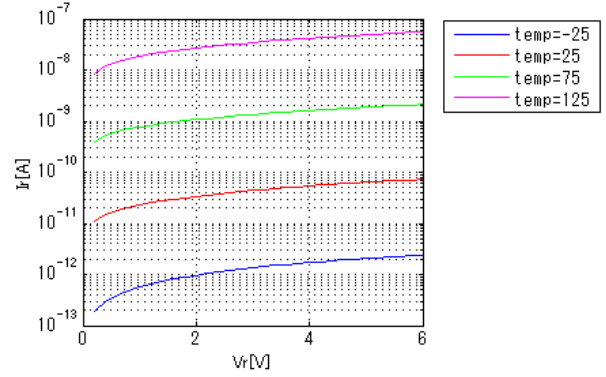
Functions	RANK	Implemented
IF-VF(Temp)	1	—
IR-VR(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	—
Zz-Iz	1	○
Rectification characteristics(Bridge)	1	—
Surge voltage-Transient	1	—

Simulation results are following.  
 Explanatory notes — : simulated

**VrIr[Temp]**

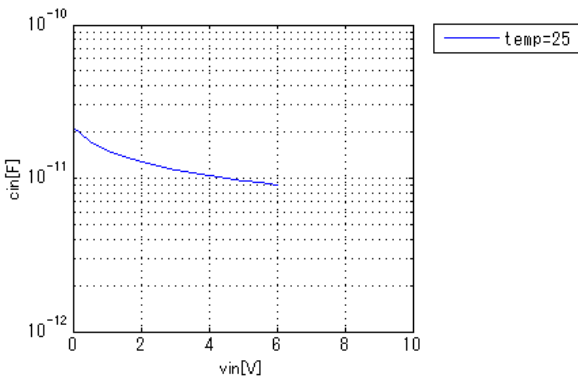


**IrVr[Temp]**



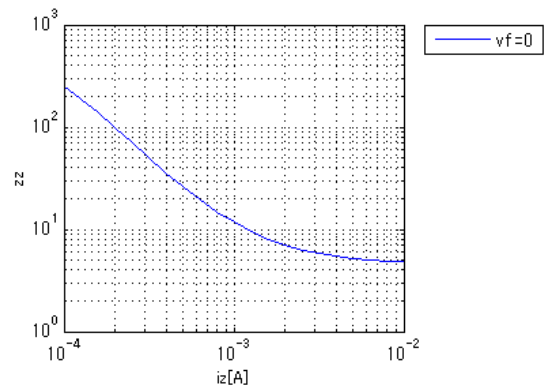
**CjVr**

Freq = 1000000Hz



**ZzIz**

izl = 0.885377, izh = 1.1146236



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MoDeCH Inc.

Head Office

Location: 5-15 Yokoyama-cho, Hachioji-Shi, Tokyo 192-0081, Japan

Tel:+81-42-656-3360

E-Mail:[model-on-support@modech.co.jp](mailto:model-on-support@modech.co.jp)

URL:<http://www.modech.com/en/>