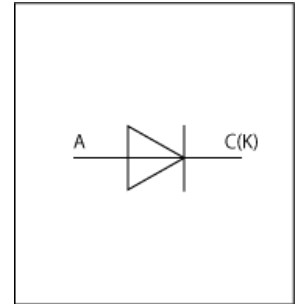


# ADS Model

## Rectifier Diode

### SHINDENGEN

### D1N60-5070



#### Model Information

**Model** A macro model based on general SPICE diode model  
**Call Name** MDC\_D1N60\_5070\_AD  
**Pin Assign** 1:C 2:A  
**File List** Model Library MDC\_D1N60\_5070\_AD.zip  
 Model Report MDC\_D1N60-5070\_AD.pdf (this file)

**Verified Simulator Version** ADS 2022 update 1  
**Note**

#### References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version Rev.01(2020.01)
- Product name D1N60-5070
- Company name Shindengen Electric Manufacturing Co., Ltd.
- Characteristics IfVf[Temp],IrrVr[Temp],SurgeWaveform

#### 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	0	to	600	V
Temperature	-55	to	150	deg C

Diode

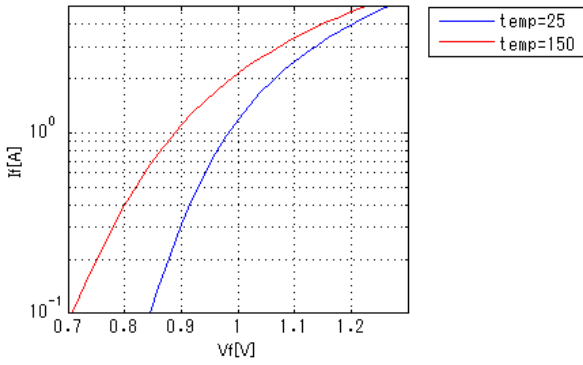
○ : Implemented  
 × : Not Implemented  
 — : Not applicable

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

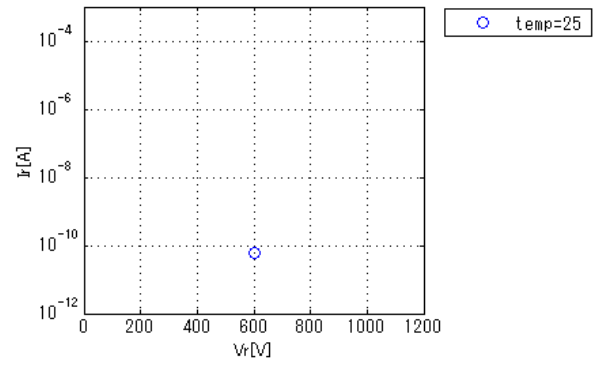
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	—
Reverse recovery characteristics	1	—
Rectification characteristics(Bridge)	1	—
Surge current-Transient	1	○

Simulation results are following.  
 Explanatory notes — : simulated

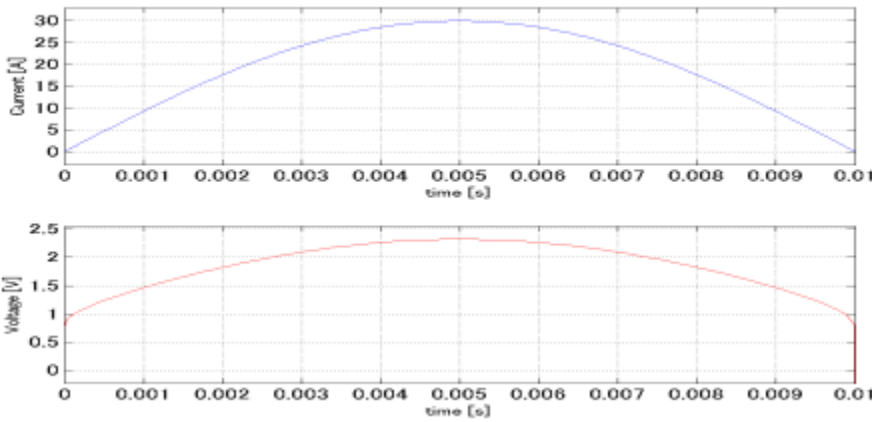
**IfVf[Temp]**



**IrVr[Temp]**



**Surge Waveform ( 50Hz forward half sine Blue : Input Current Red : Sim Voltage )**



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