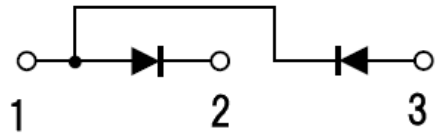


# PSpice Model

## Rectifier Diode

### SanRex

### DD100KB160



### Model Information

**Model** A macro model based on general SPICE diode model  
**Call Name** MDC\_DD100KB160\_PS  
**Pin Assign** 1:A1C2 2:C1 3:A2  
**File List** Model Library MDC\_DD100KB160\_PS01.lib  
 Model Report MDC\_DD100KB160\_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 Unknown
- Product name DD100KB160
- Company name Sansha Electric Manufacturing Co.,Ltd.
- Characteristics IfVf[Temp],Irvr[Temp],SurgeCurrentWaveform

### 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 | 1,600 | V     |
| Temperature     | -40   | to | 125   | deg C |

## Diode

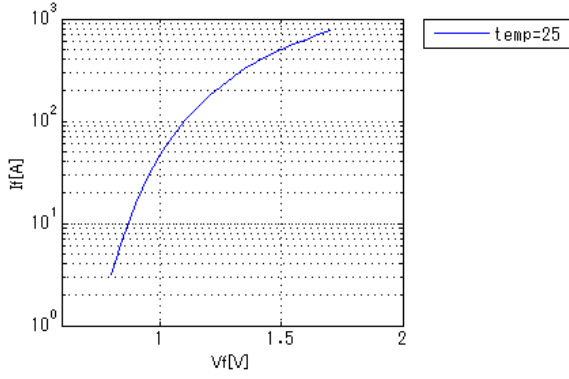
○ : Implemented  
× : Not Implemented  
— : Not applicable

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

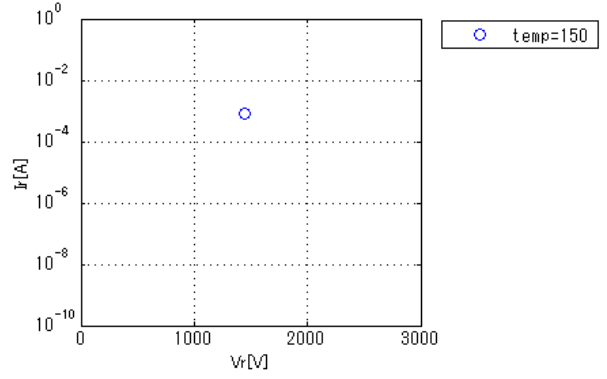
| Functions                             | RANK | Implemented |
|---------------------------------------|------|-------------|
| IF-VF(Temp)                           | 1    | ○           |
| IR-VR(Temp)                           | 1    | ○           |
| Capacitance                           | 1    |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

Simulation results are following.  
 Explanatory notes — : simulated

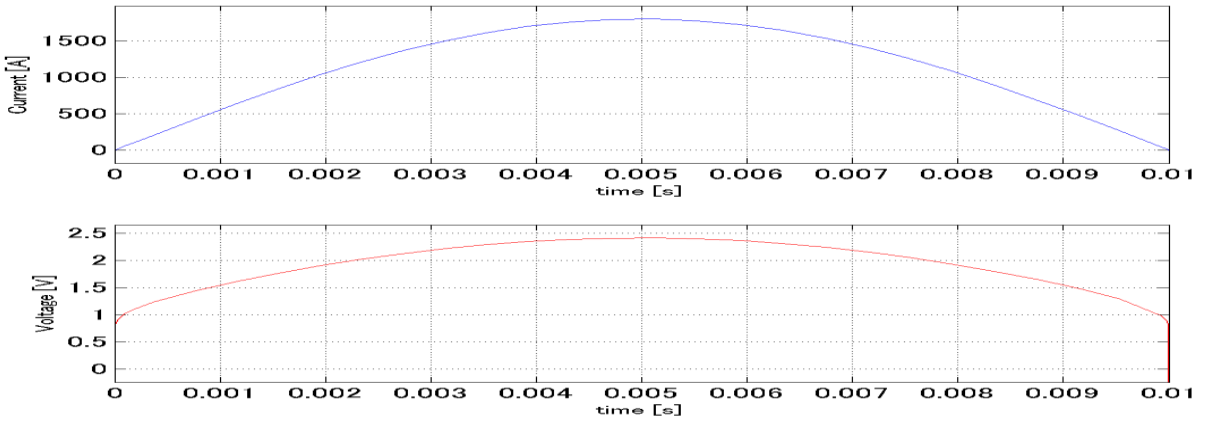
**IfVf[Temp]**



**IrVr[Temp]**



**Surge Current Waveform ( Forward Sine Half 50Hz )**



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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/>