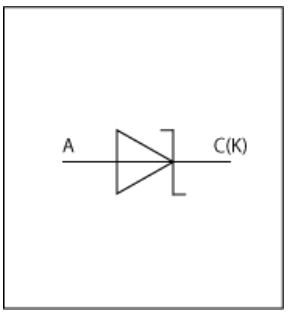
PSpice Model
Zener Diode
VISHAY INTERTECH
3KASMC24A



Model Information

Model	A macro model based on general SPICE diode model	
Call Name	MDC_3KASMC24A_PS	
Pin Assign	1:A 2:C	
File List	Model Library	MDC_3KASMC24A_PS01.lib
	Model Report	MDC_3KASMC24A_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 21-Oct-08
- ●Product name 3KASMC24A
- ●Company name Vishay Intertechnology, Inc.
- ●Characteristics IfVf[Temp],VrIr[Temp],IrVr[Temp],VrIr[Temp]2,CjVr,SurgeReverseCurrentWaveform,SurgeForwaredCurrentWaveform

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	26.7(at 1mA)	to	29.5(at 1mA)	V
Clamping Voltage(max)	38.9(at 77.1A)	to	38.9(at 77.1A)	V
Temperature	-65	to	185	deg C

Diode

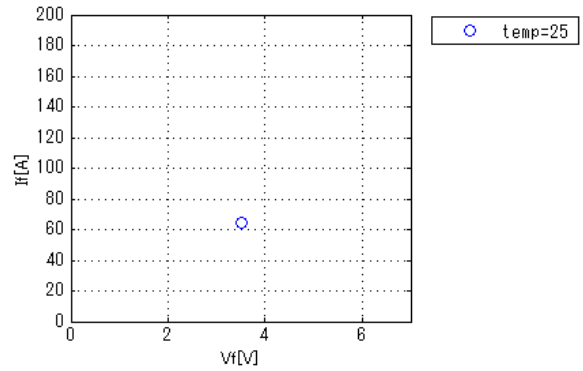
○ : Implemented
× : Not Implemented
— : Not applicable

Model Functions Table

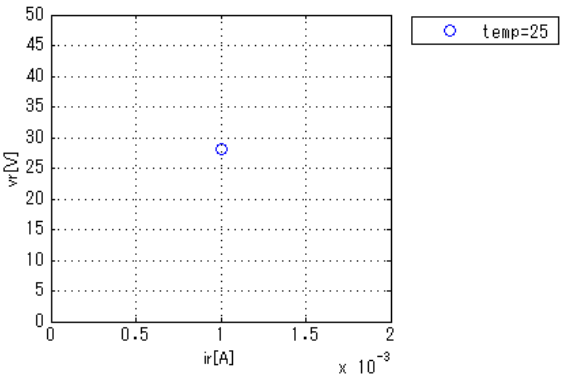
	RANK=1	
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	—
Rectification characteristics(Bridge)	1	—

Simulation results are following.
Explanatory notes — : simulated

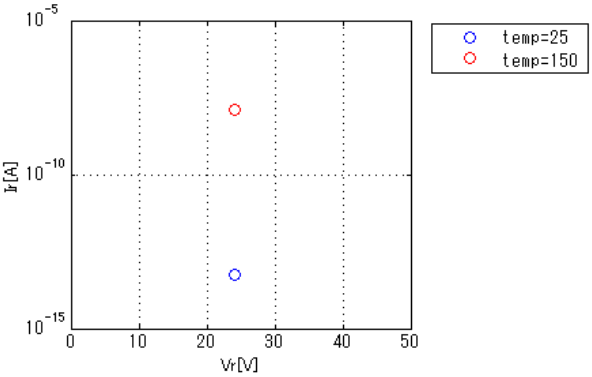
IfVf[Temp]



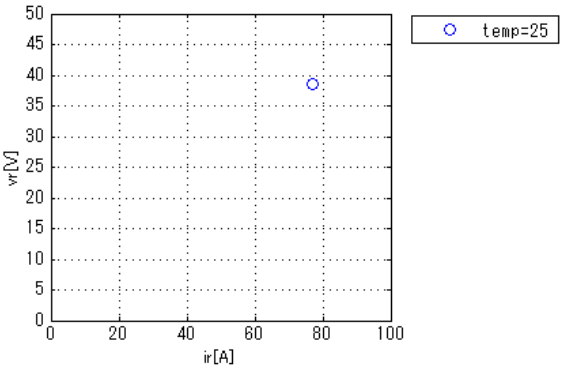
VrIr[Temp] (Zener Voltage)



IrVr[Temp] (Leak Current)

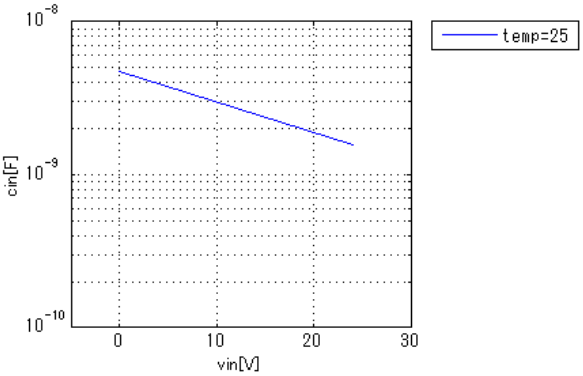


VrIr[Temp]2 (Clamping Voltage)



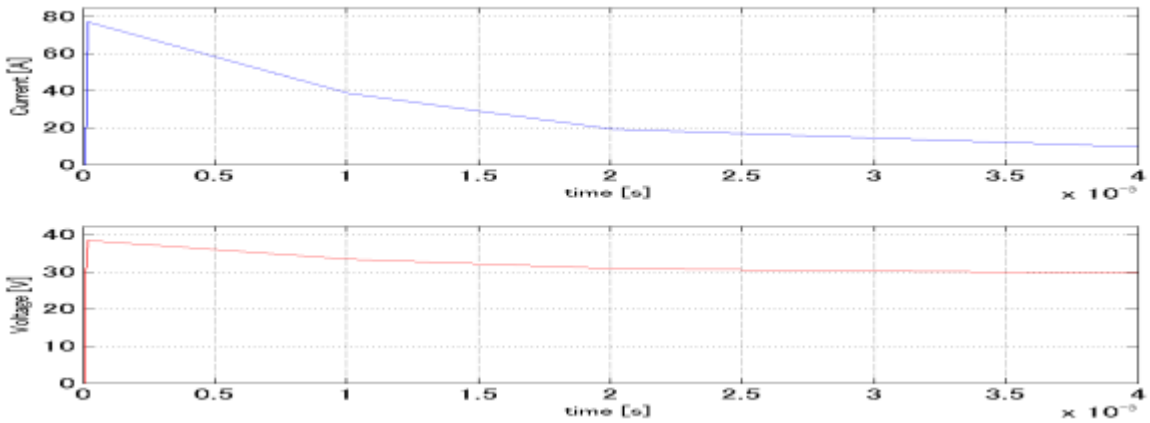
CjVr

Freq = 1000000Hz

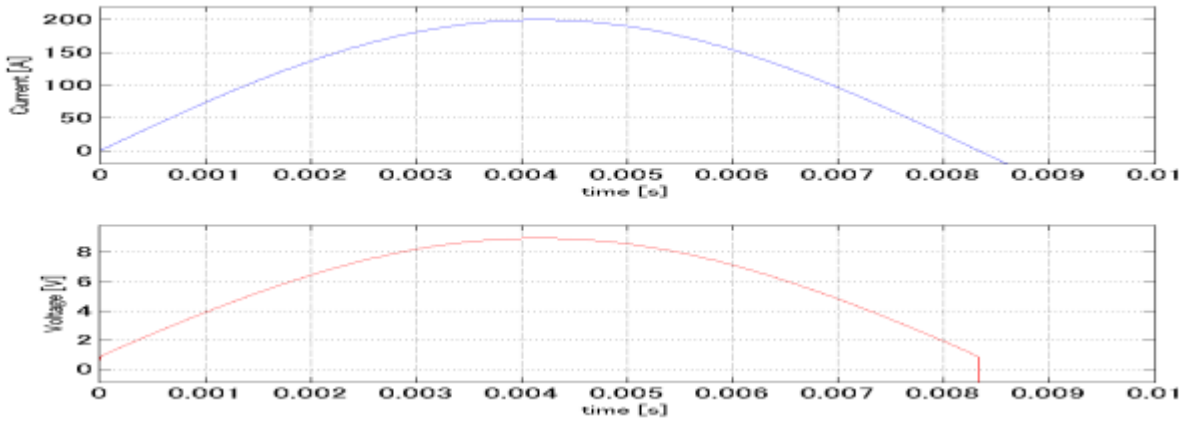


Simulation results are following.
Explanatory notes — : simulated

Surge Reverse Current Waveform



Surge Forward Current Waveform



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