

PSpice Model

Rectifier Diode

TOSHIBA

CRG09A



Model Information

Model A macro model based on general SPICE diode model
Call Name MDC_CRG09A_PS
Pin Assign 1:C 2:A
File List Model Library MDC_CRG09A_PS01.lib
 Model Report MDC_CRG09A_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 2019-07-09 Rev.2.0
- Product name CRG09A
- Company name Toshiba Corporation
- 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	400	V
Temperature	-55	to	150	deg C

Diode

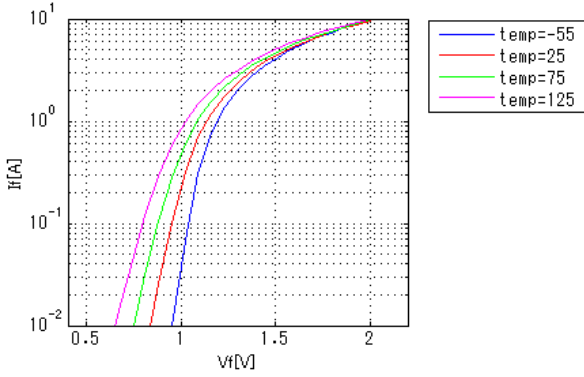
○ : Implemented
× : Not Implemented
— : Not applicable

Model Functions Table
RANK=1

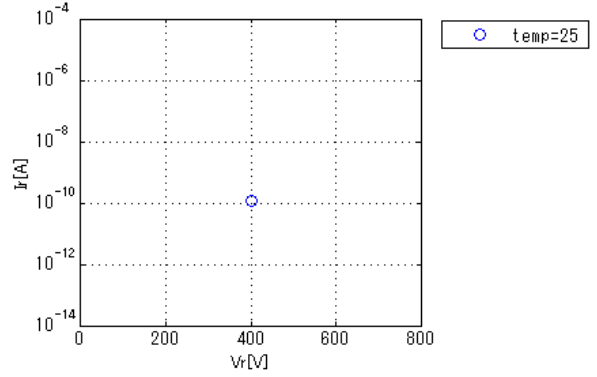
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	—
Reverse recovery characteristics	1	—
Zz-Iz	1	—
Rectification characteristics(Bridge)	1	—
Surge-Transient	1	○

Simulation results are following.
 Explanatory notes — : simulated

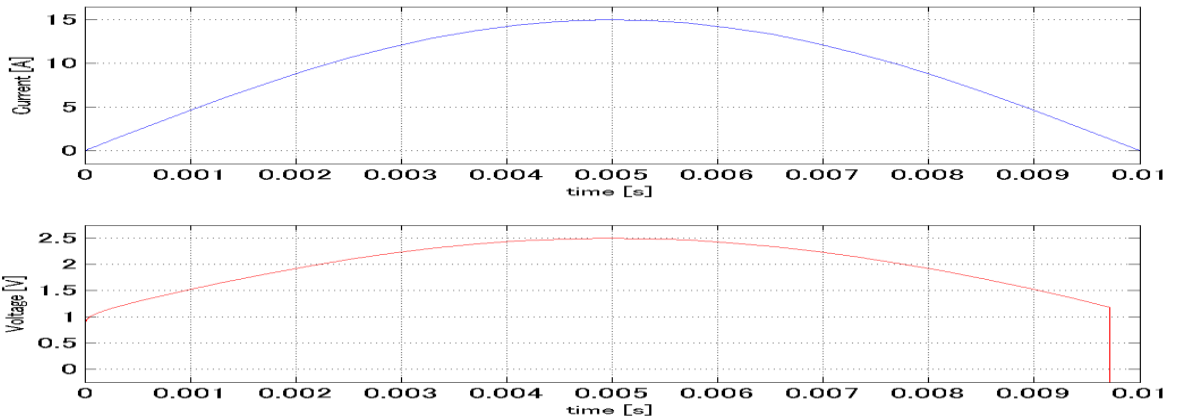
IfVf[Temp]



IrVr[Temp]



Surge Current Waveform (Forward Sine Half 50Hz)



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