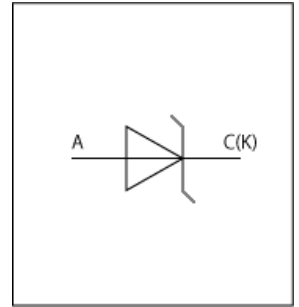


LTspice Model

TVS

SHINDENGEN

ST06-33CE



Model Information

Model A macro model based on general SPICE diode model
Call Name MDC_ST06-33CE_LT
Pin Assign 1:C 2:A
File List Model Library MDC_ST06-33CE_LT01.lib
 Model Report MDC_ST06-33CE_LT.pdf (this file)

Verified Simulator Version LTspice version XVII
Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 2020.01
- Product name ST06-33CE
- Company name Shindengen Electric Manufacturing Co., Ltd.
- Characteristics VrIr[Temp],BvTemp,IrTemp[Vr],CapacitanceFreq[Vr],CjVr,Su
rgeCurrentWaveform

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	33	to	33	V
Temperature	-55	to	175	deg C

Diode

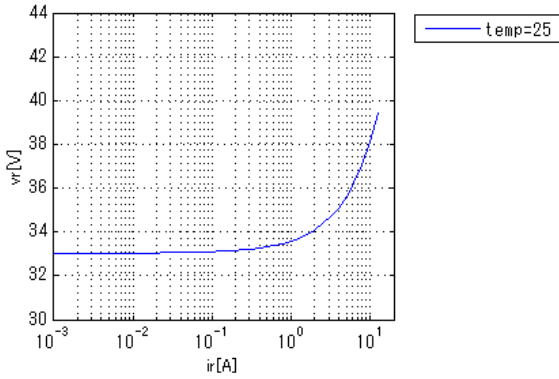
○ : Implemented
× : Not Implemented
— : Not applicable

Model Functions Table
RANK=1

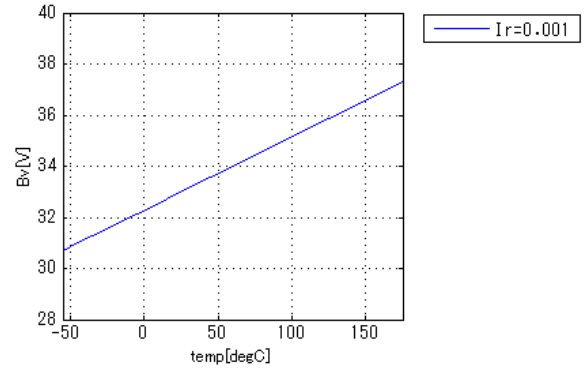
Functions	RANK	Implemented
IF-VF(Temp)	1	—
IR-VR(Temp)	1	○
BV(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	—
Zz-Iz	1	—
Rectification characteristics(Bridge)	1	—
Surge-Transient	1	○
tlp	1	—

Simulation results are following.
 Explanatory notes — : simulated

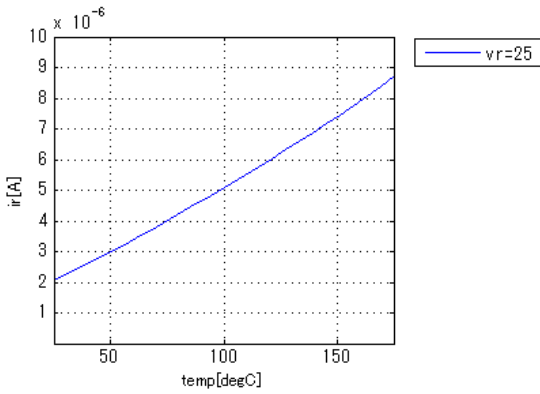
VrIr[Temp]



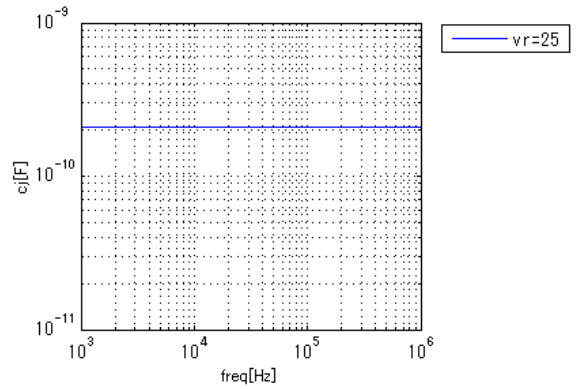
BvTemp



IrTemp[Vr]

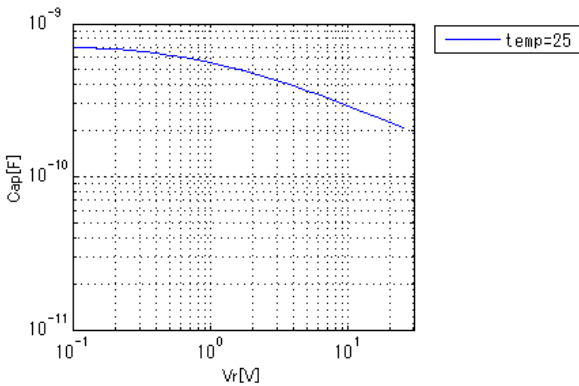


CapacitanceFreq[Vr]



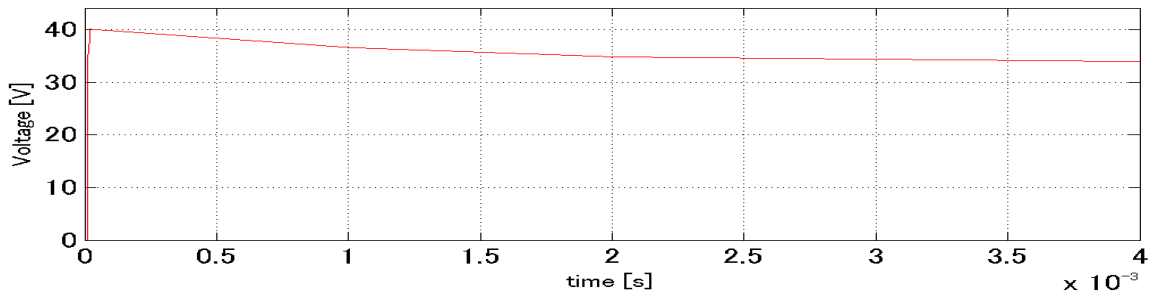
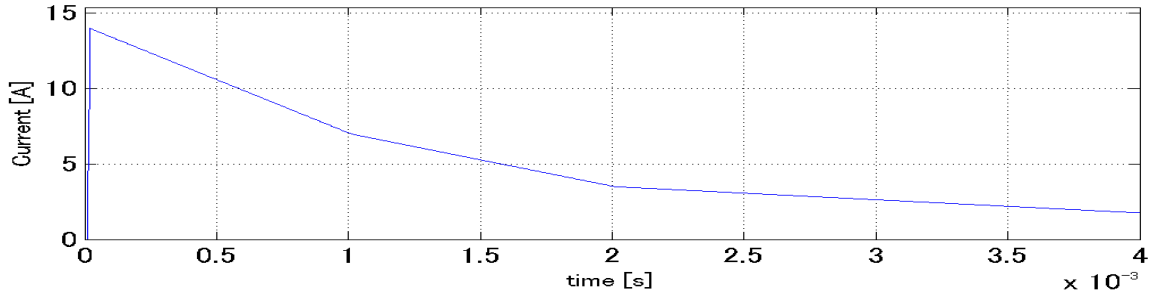
CjVr

Freq = 100000Hz



Simulation results are following.
Explanatory notes — : simulated

Surge Current Waveform (Reverse 10u/1000u)



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