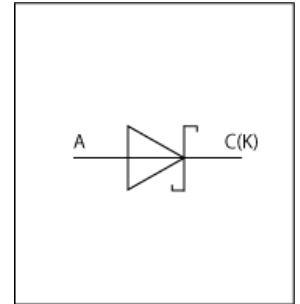


LTspice Model

Schottky Diode

ROHM

RB160L-40TE25



Model Information

Model A macro model based on general SPICE diode model
Call Name MDC_RB160L-40TE25_LT
Pin Assign 1:C 2:A
File List Model Library MDC_RB160L-40TE25_LT01.lib
 Model Report MDC_RB160L-40TE25_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 2019/05/28_Rev.002
- Product name RB160L-40TE25
- Company name ROHM Co., Ltd.
- Characteristics IfVf[Temp],IrrVr[Temp],CjVr,Trrlflr,TrrWaveform,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.	
Forward Voltage	0	to	40	V
Temperature	-40	to	150	deg C

Diode

○ : Implemented
× : Not Implemented
— : Not applicable

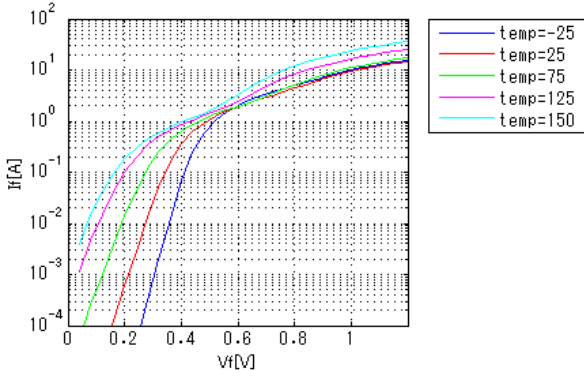
Model Functions Table

RANK=1

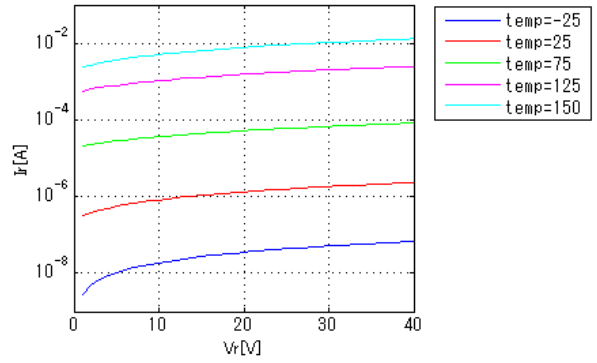
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	○
Rectification characteristics(Bridge)	1	—
Surge voltage-Transient	2	—

Simulation results are following.
 Explanatory notes — : simulated

IfVf[Temp]

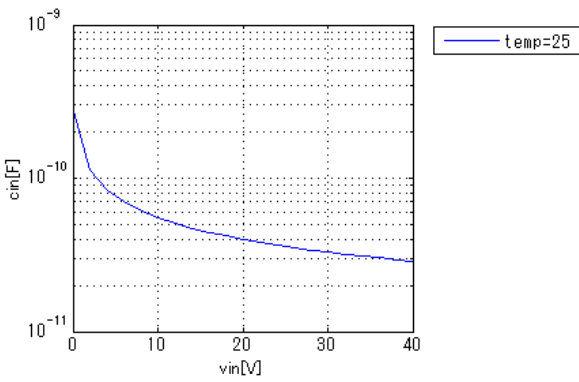


IrVr[Temp]



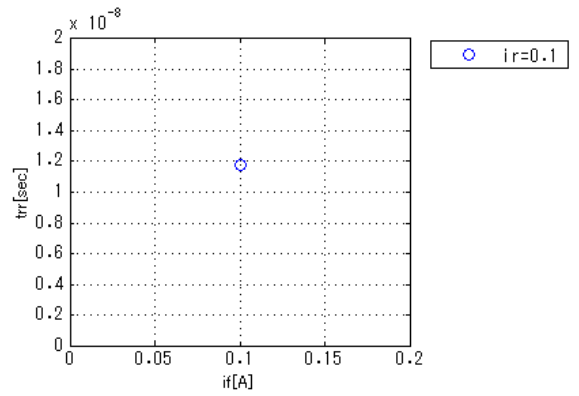
CjVr

Freq = 1000000Hz



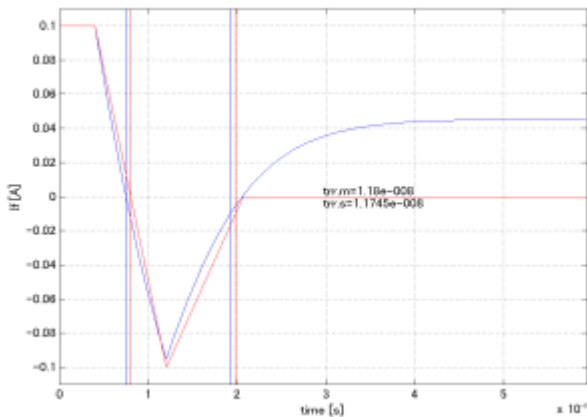
TrrIfIr

irr = 0.01A, didt = 25A/us



TrrWaveform (Red : Datasheet Blue : Simulation)

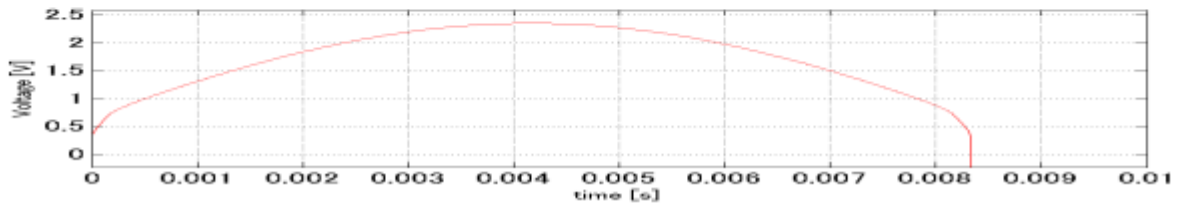
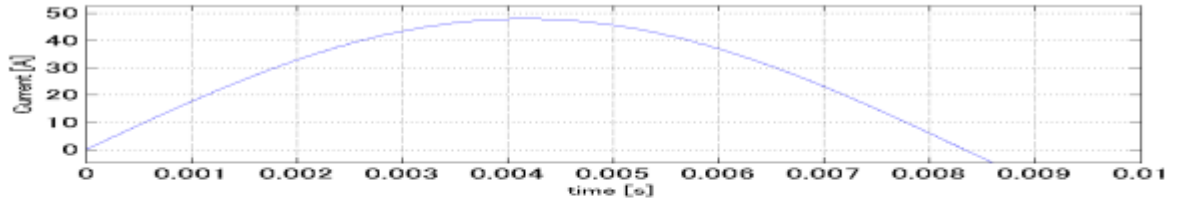
If = 0.1A, ir = 0.1A, irr = 0.01A, didt = 25A/us



Simulation results are following.

Explanatory notes — : simulated

Surge Waveform (60Hz half sine wave)



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