

PSpice Model

Schottky Barrier Diode

ROHM

RB050LAM-40TF

Model Information

Model	A macro model based on general SPICE diode model		
Call Name	MDC_RB050LAM-40TF_PS		
Pin Assign	1:C 2:A		
File List	Model Library	MDC_RB050LAM-40TF_PS.lib	
	Model Report	MDC_RB050LAM-40TF_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 2019-05-28/Rev.002
- Product name RB050LAM-40TF
- Company name ROHM Co.,Ltd

[Characteristics listed]

- Characteristics IfVf[Temp], IrVr[Temp], CjVr, TrrIfIr

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	40	V
Temperature	-25	to	150	deg C

Diode

○ : Implemented
× : Not Implemented
— : Not applicable

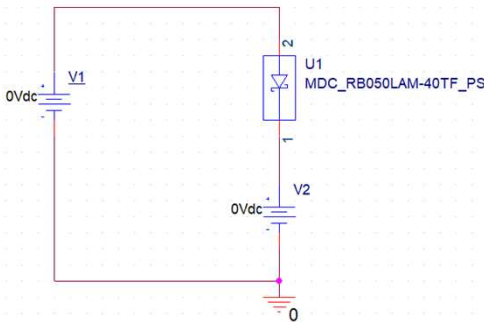
Model Functions Table

RANK=1

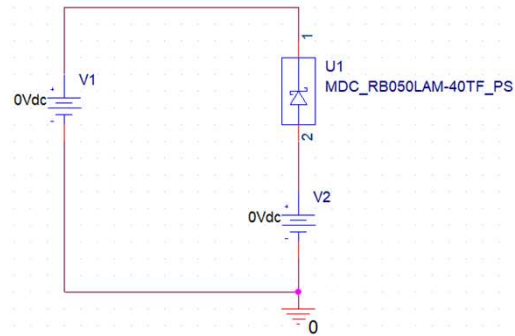
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	○
Rectification characteristics(Bridge)	1	—
Surge voltage-Transient	2	—

**IfVf[Temp], IrVr[Temp] Testbench
Referred to Data Sheet**

IfVf[Temp]

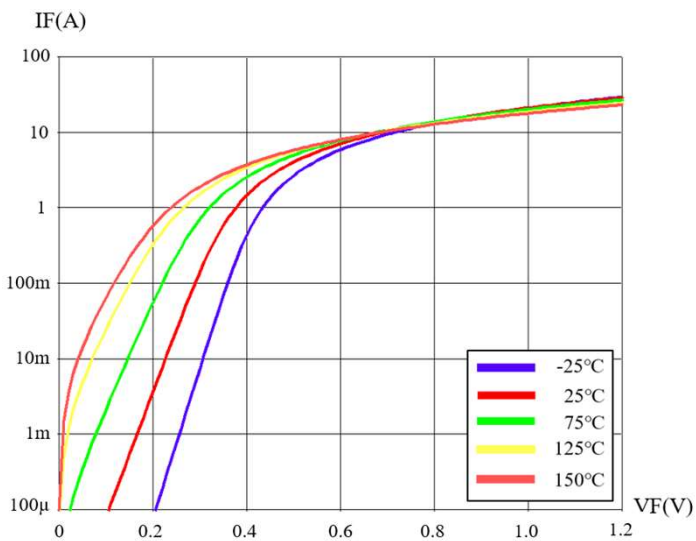


IrVr[Temp]

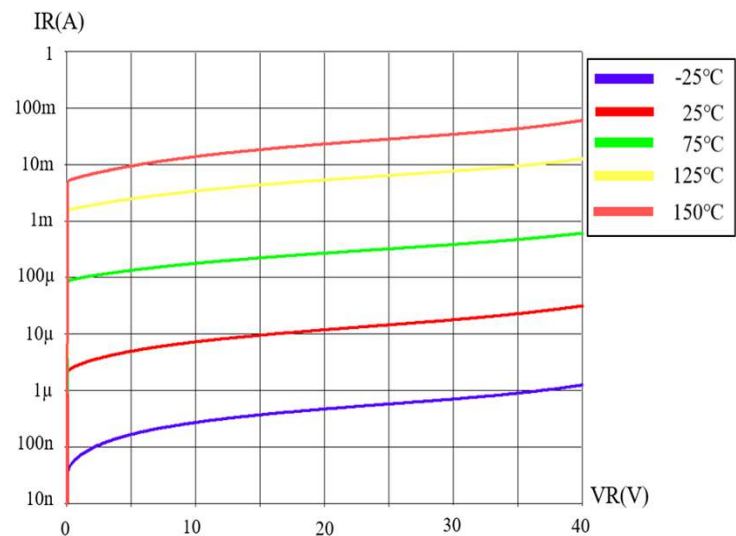


Simulation results are following.
Explanatory notes — : simulated

IfVf[Temp]



IrVr[Temp]

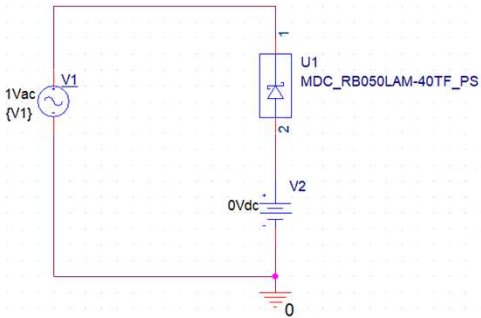


CjVr, trrlflr Testbench

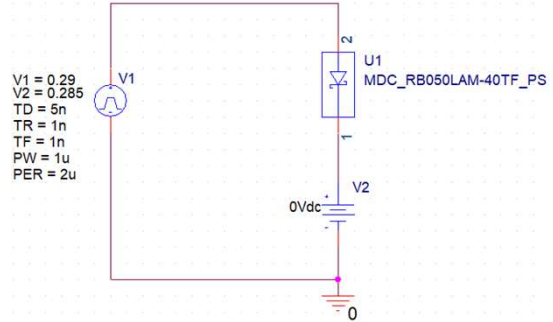
Referred to Data Sheet

CjVr

PARAMETERS:
V1 = 0

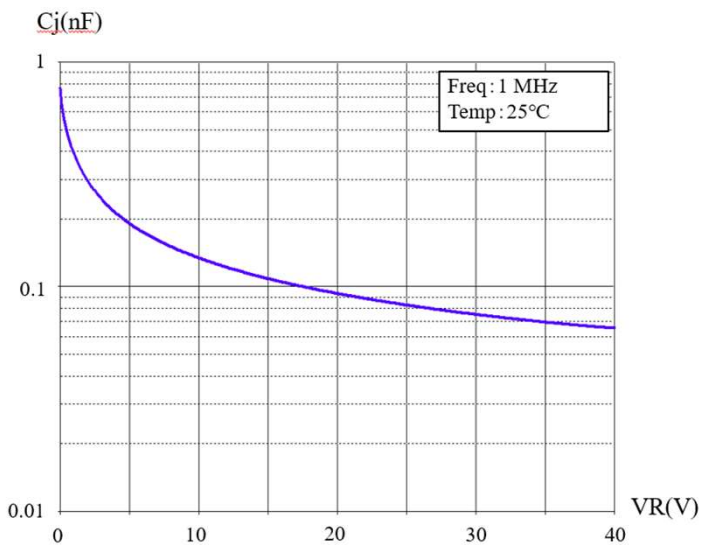


trrlflr

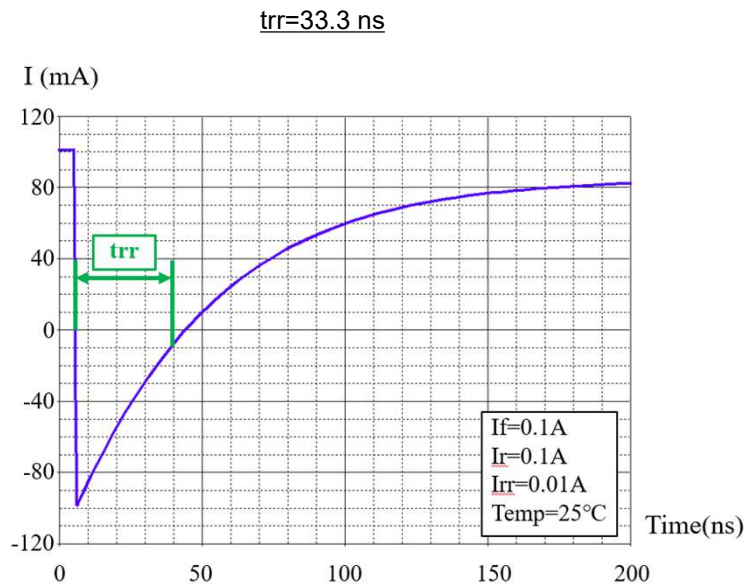


Simulation results are following.
Explanatory notes — : simulated

CjVr



trrlflr



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