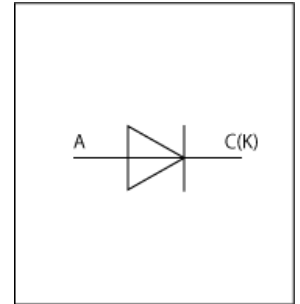


PSpice Model

Switching Diode

ROHM

1SS355VMTE



Model Information

Model A macro model based on general SPICE diode model
Call Name MDC_1SS355VMTE_PS
Pin Assign 1:C 2:A
File List Model Library MDC_1SS355VMTE_PS01.lib
 Model Report MDC_1SS355VMTE_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 Unknown
- Product name 1SS355VMTE
- Company name ROHM Co., Ltd.
- Characteristics IfVf[Temp], IrVr[Temp], CjVr, TrrlfIr, 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.	
Reverse Voltage	0	to	80	V
Temperature	-55	to	150	deg C

Diode

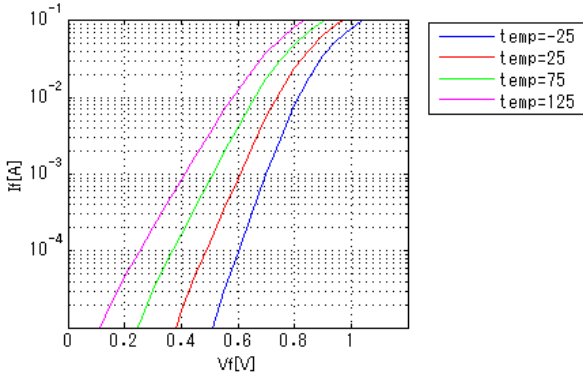
○ : Implemented
× : Not Implemented
— : Not applicable

Model Functions Table
RANK=1

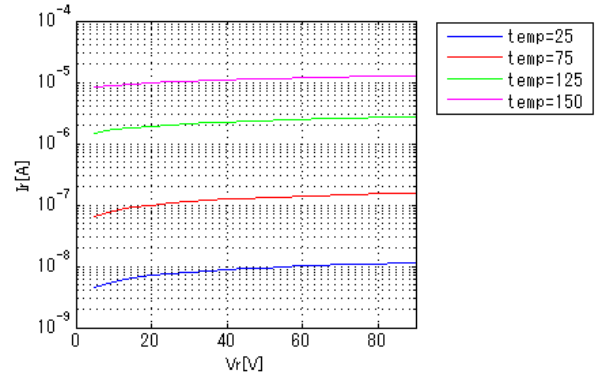
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	○
Zz-Iz	1	—
Rectification characteristics(Bridge)	1	—
Surge -Transient	1	○

Simulation results are following.
 Explanatory notes — : simulated

IfVf[Temp]

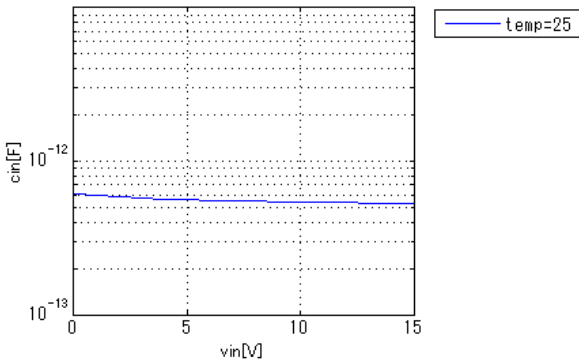


IrVr[Temp]



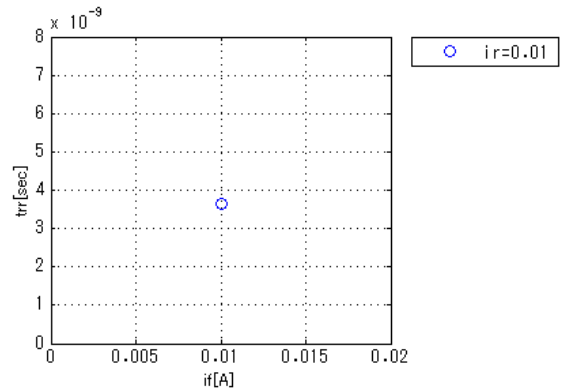
CjVr

Freq = 1000000Hz



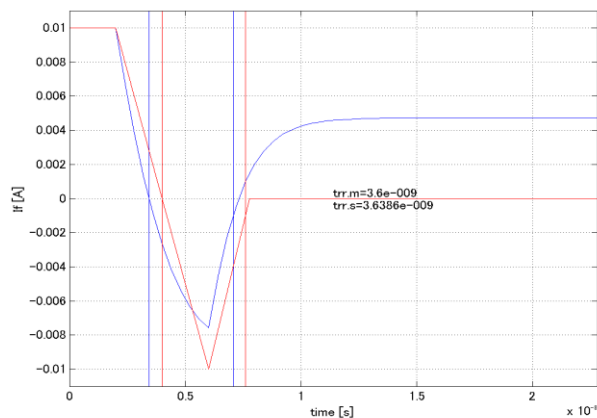
TrrIfIr

irr = 0.001A, didt = 5A/us



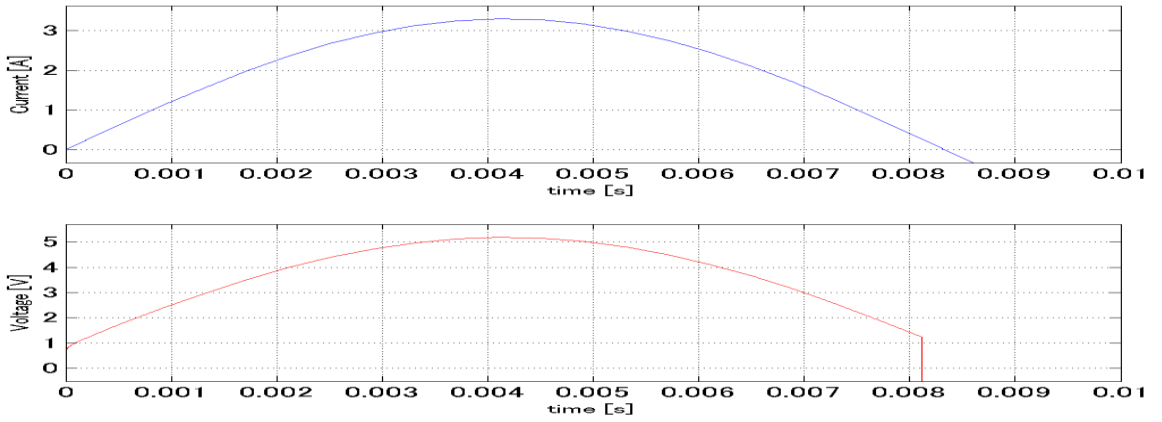
Trr Waveform (Red : Datasheet Blue : Simulation)

If = 0.01A, ir = 0.01A, irr = 0.001A, didt = 5A/us



Simulation results are following.
Explanatory notes — : simulated

Surge Current Waveform (Forward Sine Half 60Hz)



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MoDeCH Inc.

Head Office

Location: 5-15 Yokoyama-cho, Hachioji-Shi, Tokyo 192-0081, Japan

Tel:+81-42-656-3360

E-Mail:model-on-support@modech.co.jp

URL:<http://www.modech.com/en/>