

PSpice Model Super fast recovery diode ROHM RFV5BM6S

Model Information

Model A macro model based on general SPICE diode model

Call Name MDC RFV5BM6S PS

Pin Assign 1:A 2:C 3:n.c

File List Model Library MDC_RFV5BM6S_PS.lib

Model Report MDC RFV5BM6S 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/VersionProduct nameCompany name2018.12/Rev. BRFV5BM6SROHM

[Characteristics listed]

● Characteristics If Vf[Temp], IrVr[Temp], CjVr, trrlflr

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 | 600 | V |
| Temperature | 25 | to | 150 | deg C |





Model Functions Table

Diode

O: Implemented

×:Not Implemented

—: Not applicable

RANK=1

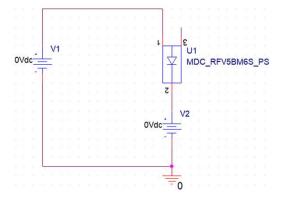
| Functions | RANK | Implemented |
|---------------------------------------|------|-------------|
| IF-VF(Temp) | 1 | 0 |
| IR-VR(Temp) | 1 | 0 |
| Capacitance | 1 | 0 |
| Reverse recovery characteristics | 1 | 0 |
| Rectification characteristics(Bridge) | 1 | _ |
| Surge voltage-Transient | 2 | - |



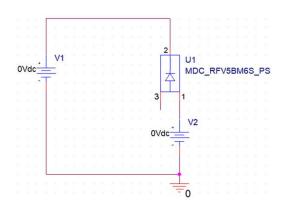
IfVf[Temp], IrVr[Temp] Testbench

Referred to Data Sheet

IfVf[Temp]



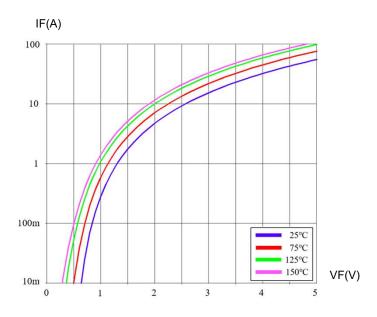
IrVr[Temp]



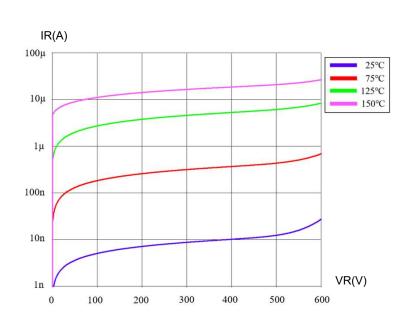
Simulation results are following.

Explanatory notes — : simulated

IfVf[Temp]



IrVr[Temp]

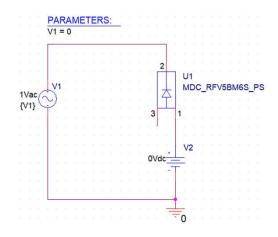


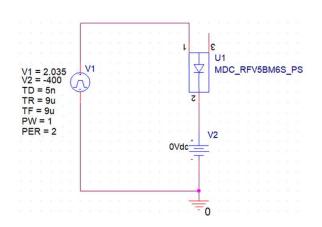


CjVr, trrlflr Testbench

Referred to Data Sheet

CjVr trrlflr

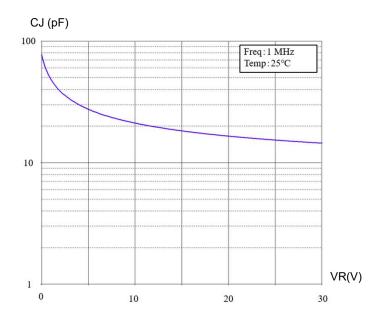


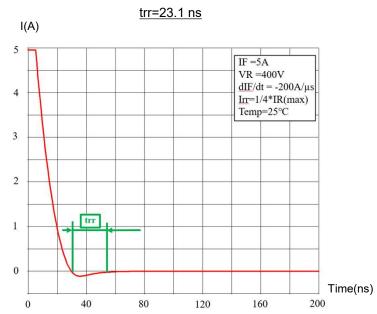


Simulation results are following.

Explanatory notes — : simulated

CjVr trrlflr







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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/