

PSpice Model

Zener Diode

ROHM

YFZVFHTR4.7B

Model Information

Model A macro model based on general SPICE diode model
Call Name MDC_YFZVFHTR4_7B_PS
Pin Assign 1:C 2:A
File List Model Library MDC_YFZVFHTR4_7B_PS.lib
 Model Report MDC_YFZVFHTR4_7B_PS.pdf(this file)
Verified Simulator Version PSpice version 17.4

Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 2017/02/23_Rev.002
- Product name YFZVFHTR4.7B
- Company name ROHM Co., Ltd.

[Characteristics listed]

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

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.	
Temperature	-25	to	150	deg C

Diode

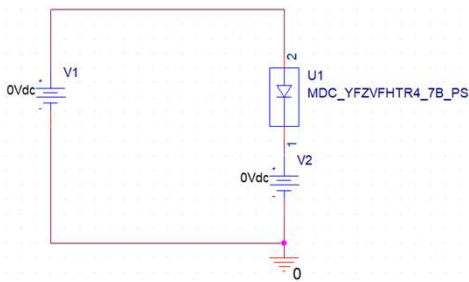
○ : Implemented
 × : Not Implemented
 – : Not applicable

Model Functions Table
RANK=1

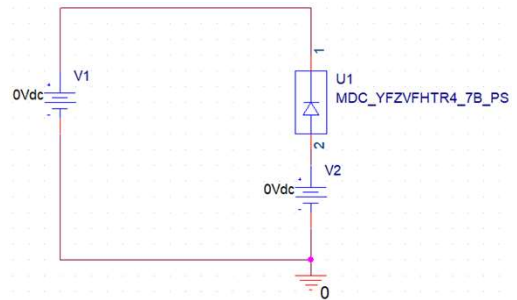
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
IZ-VZ(Temp)	1	○
Rectification characteristics(Bridge)	1	–
Surge voltage-Transient	2	–

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

IfVf[Temp]

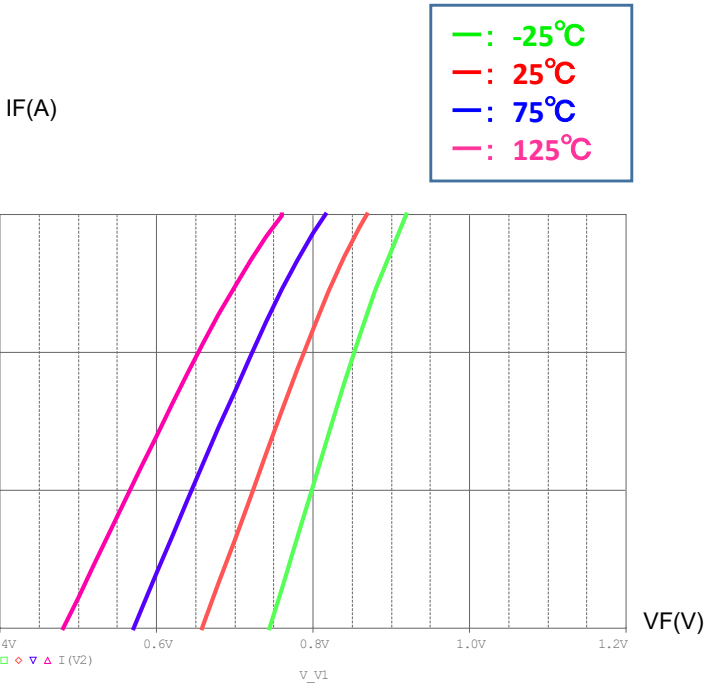


IrVr[Temp]

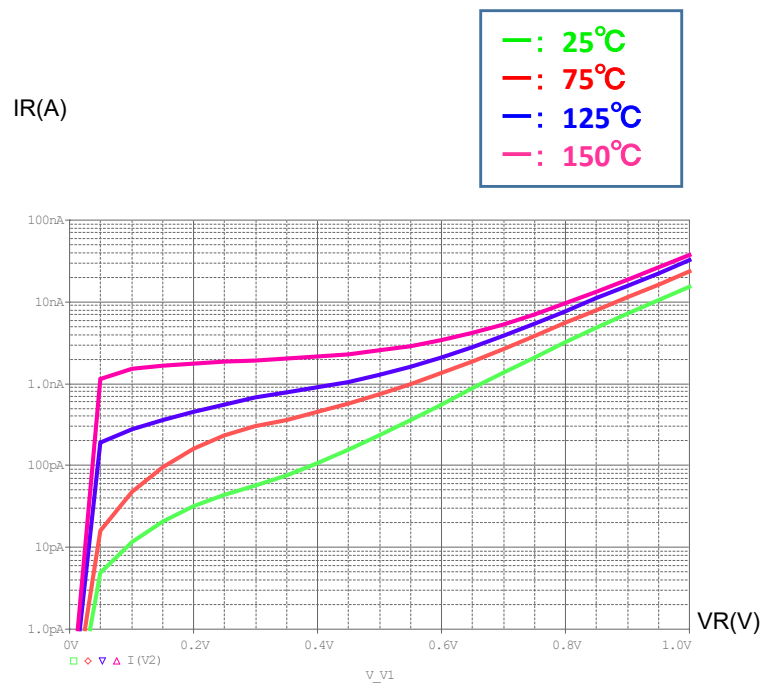


Simulation results are following.
Explanatory notes — : simulated

IfVf[Temp]

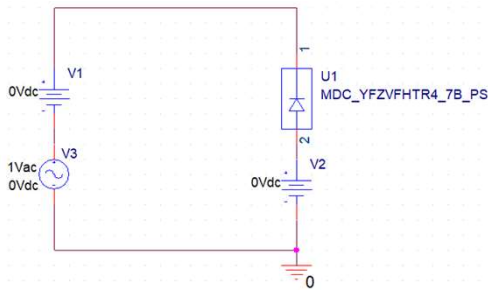


IrVr[Temp]

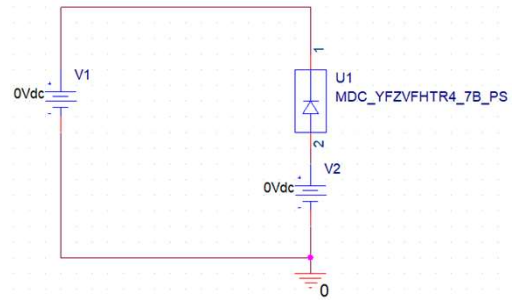


**CjVr, IzVz[Temp] Testbench
Referred to Data Sheet**

CjVr



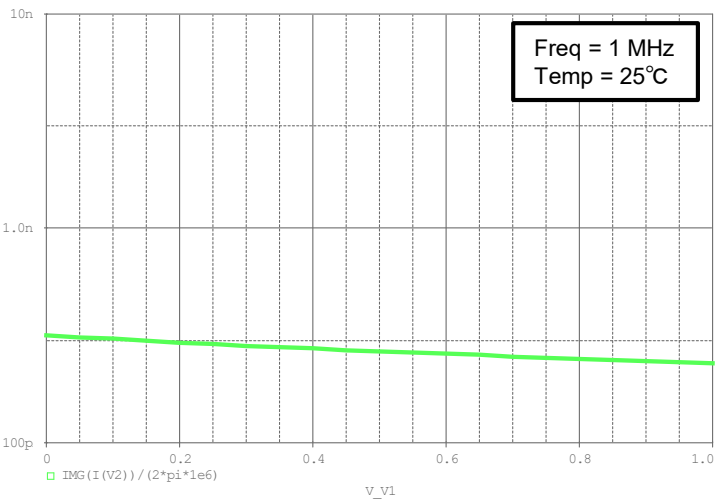
IzVz[Temp]



Simulation results are following.
Explanatory notes — : simulated

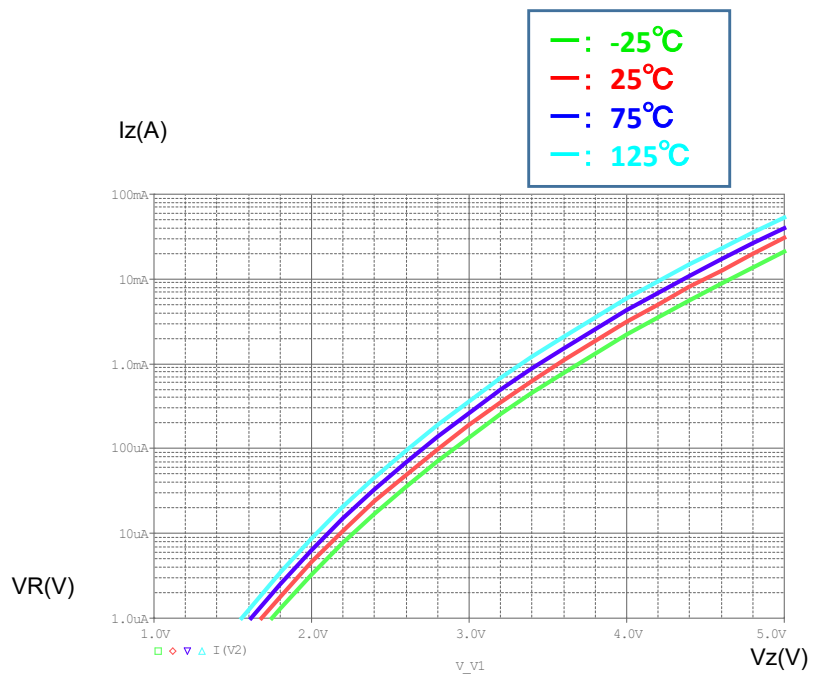
CjVr

CJ (pF)



IzVz[Temp]

Iz(A)



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