

PSpice Model

Rectifier Diode

Soild State Devices, Inc.

SRH30UFS

Model Information

Model A macro model
Call Name MDC_SRH30UFS_PS
Pin Assign 1:A 2:C
File List Model Library MDC_SRH30UFS_PS.lib
 Model Report MDC_SRH30UFS_PS.pdf

Verified Simulator Version

Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version N.A
- Product name SRH30UFS
- Company name Soild State Devices, Inc.

[Characteristics listed]

- Characteristics $I_f V_f[\text{temp}], I_r V_r, C_j V_r, T_{rr}$

Simulation Condition

This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Condition	Unit
Temperature	25	deg C

Diode

○ : Implemented
× : Not Implemented
— : Not applicable

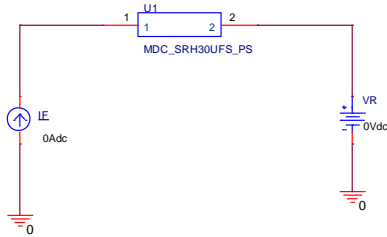
Model Functions Table

RANK=1

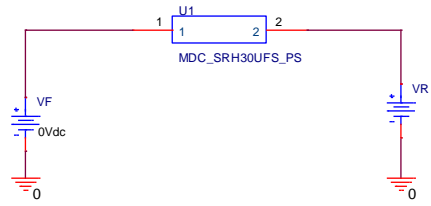
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	○
Rectification characteristics(Bridge)	1	—
Surge voltage-Transient	2	—

Simulation results are following.
 Explanatory notes — : simulated

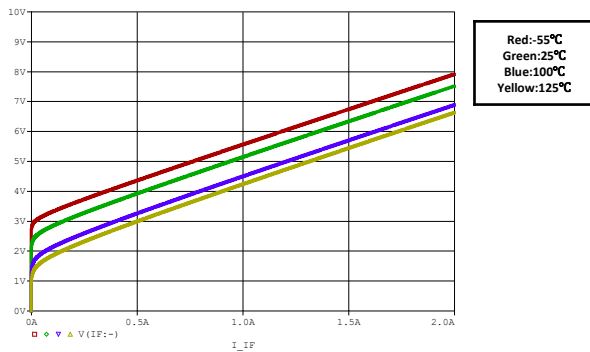
IfVf Testbench



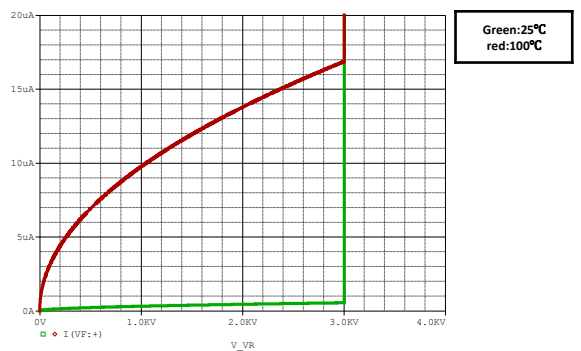
IrVr Testbench



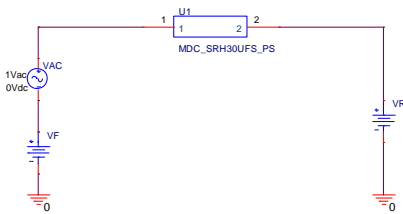
IfVf Data Sheet



IrVr Data sheet

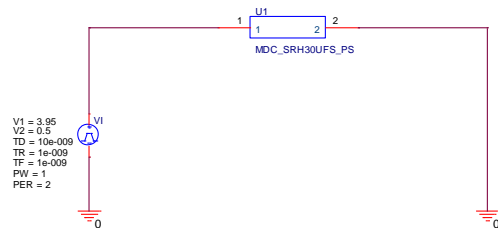


CjVr Testbench

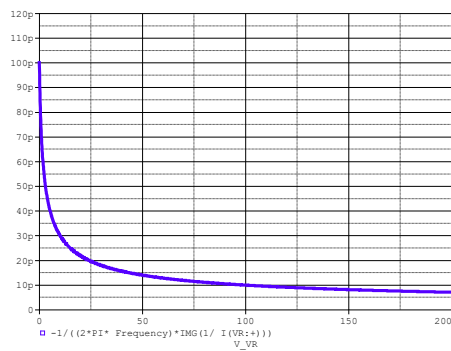


Trr Testbench

Characteristic	Symbol	MIN.	MAX.	UNIT
Reverse Recovery Time	t _{rr}	-	90	ns

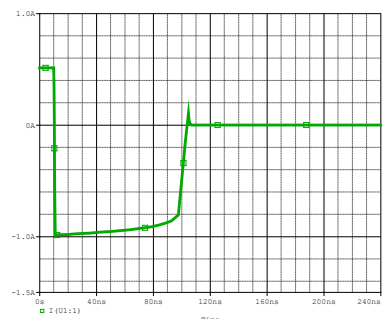


CjVr Data Sheet



Trr Data Sheet

Evaluate	Measurement	Value
<input checked="" type="checkbox"/>	XatNth Y0(U1:1,)-0.25,2)-XatNth Y0(U1:1),0,1)	91.37769ns



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