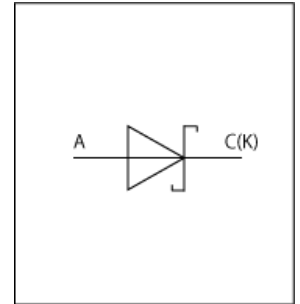


LTspice Model Schottky Diode ROHM RB751S-40TE



Model Information

Model A macro model based on general SPICE diode model
Call Name MDC_RB751S-40TE_LT
Pin Assign 1:A 2:C
File List Model Library MDC_RB751S-40TE_LT01.lib
 Model Report MDC_RB751S-40TE_LT.pdf (this file)
Verified Simulator Version LTspice version XVII
Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 2011.03 - Rev.E
- Product name RB751S-40TE
- Company name ROHM Co., Ltd.
- Characteristics IfVf[Temp],IrrVr[Temp],CjVr, 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 | 30 | V |
| Temperature | -40 | to | 125 | deg C |

Diode

○ : Implemented
× : Not Implemented
— : Not applicable

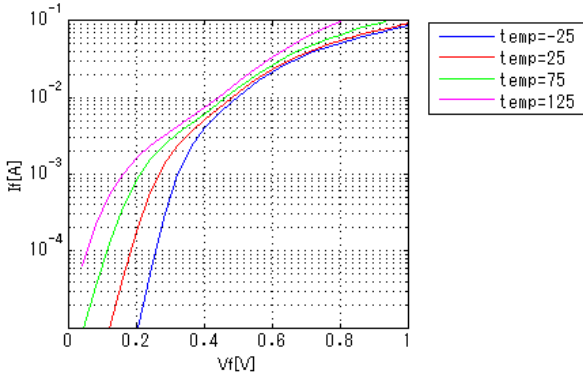
Model Functions Table

RANK=1

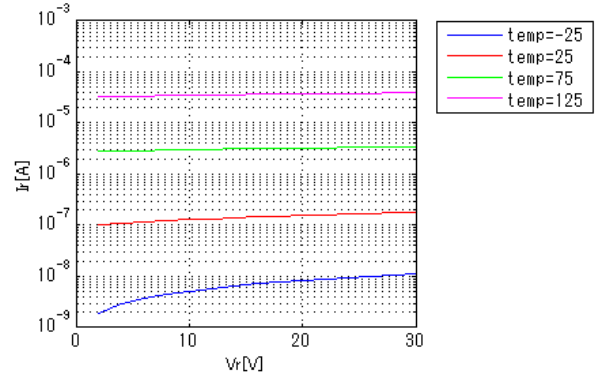
| Functions | RANK | Implemented |
|---------------------------------------|------|-------------|
| IF-VF(Temp) | 1 | ○ |
| IR-VR(Temp) | 1 | ○ |
| Capacitance | 1 | ○ |
| Reverse recovery characteristics | 1 | — |
| Rectification characteristics(Bridge) | 1 | — |
| Surge current-Transient | 1 | ○ |

Simulation results are following.
 Explanatory notes — : simulated

IfVf[Temp]

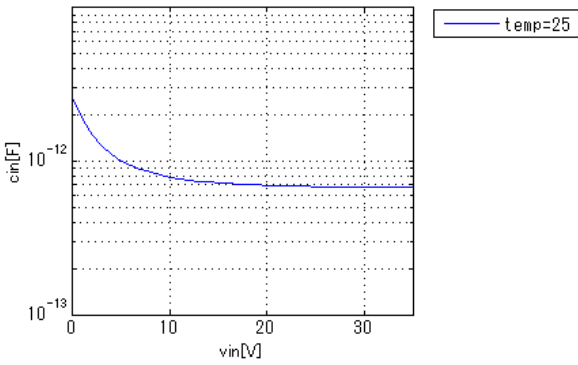


IrVr[Temp]

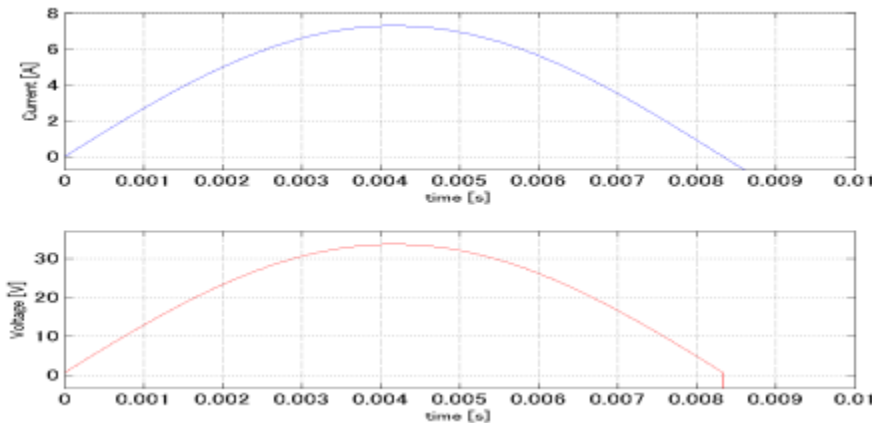


CjVr

Freq = 1000000Hz



Surge Waveform (60Hz forward half sine Blue : Input Current Red : Sim Voltage)



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