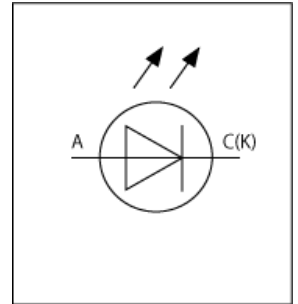


LTspice Model

Light Emitting Diode

NICHIA

NSSA146AT



Model Information

Model A macro model based on general SPICE diode model
Call Name MDC_NSSA146AT_LT
Pin Assign 1:A 2:C
File List Model Library MDC_NSSA146AT_LT01.lib
 Model Report MDC_NSSA146AT_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 Unknown
- Product name NSSA146AT
- Company name NICHIA CORPORATION
- Characteristics $I_f[V(Temp)], V_f[V(Temp)], I_r[V_r(Temp)], SurgeWaveform$

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.	
Temperature	-40	to	110	deg C

Diode

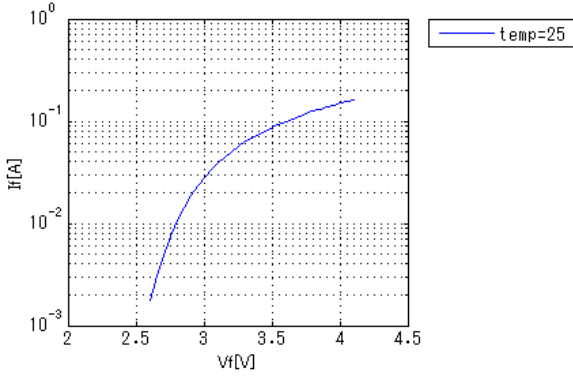
○ : Implemented
× : Not Implemented
— : Not applicable

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	○
tlp	1	—

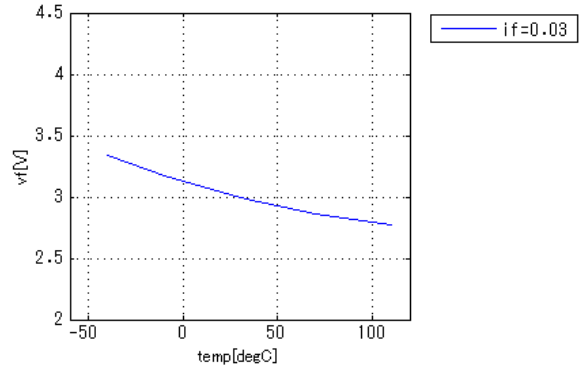
Simulation results are following.
 Explanatory notes — : simulated

IfVf[Temp]

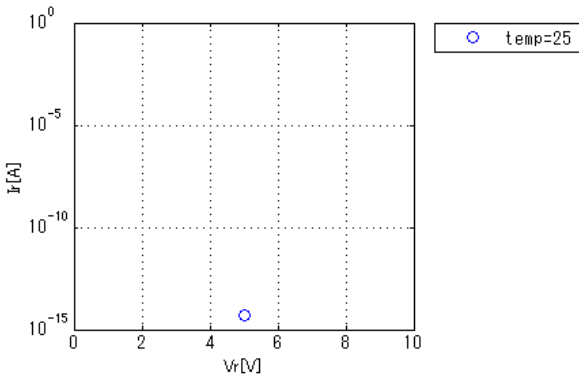


VfTemp[If]

if = 0.03



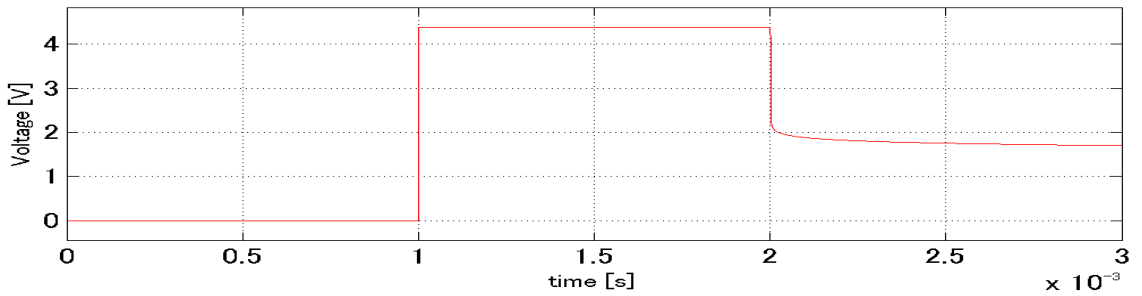
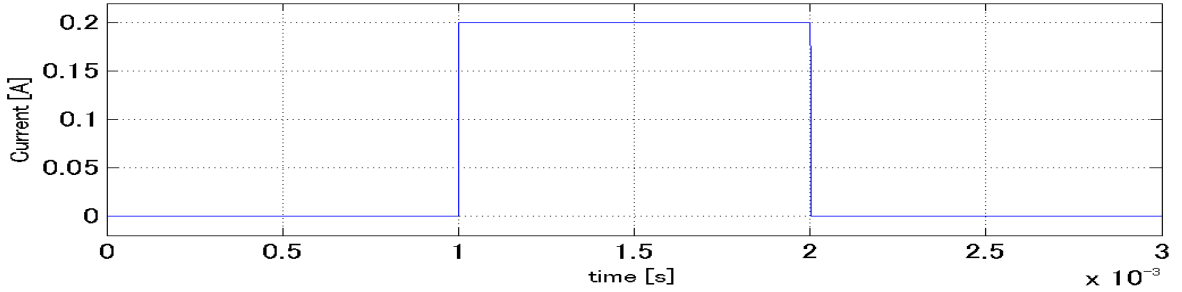
IrVr[Temp]



Simulation results are following.

Explanatory notes — : simulated

Surge Current Waveform (Forward $t_p=1\text{ms}$)



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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/>