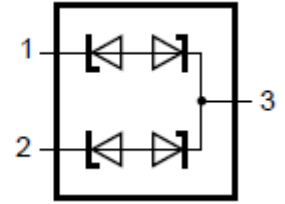
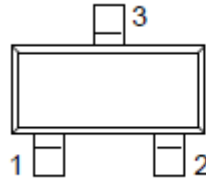


LTspice Model ESD Protection Diode Nexperia PESD2CAN



Model Information

Model A macro model based on general SPICE diode model
Call Name MDC_PESD2CAN_LT
Pin Assign 1:C1 2:C2 3:CommonC
File List Model Library MDC_PESD2CAN_LT01.lib
 Model Report MDC_PESD2CAN_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 Rev. 2 - 27 September 2012
- Product name PESD2CAN
- Company name Nexperia B.V.
- Characteristics IrVr[Temp],CjVr[Temp],VrIr[Temp],VrIr[Temp]2,ZzIz, SurgeG unWaveform

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	24	V
Temperature	-65	to	150	deg C

Diode

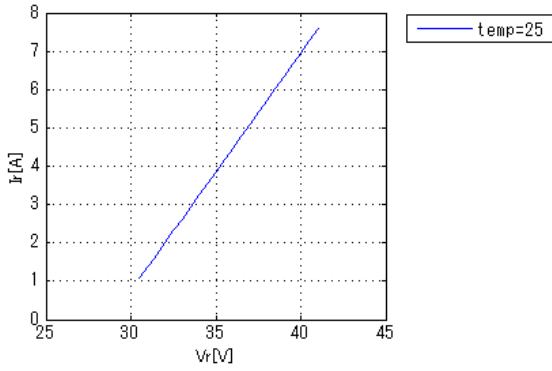
○ : Implemented
× : Not Implemented
— : Not applicable

Model Functions Table
RANK=1

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

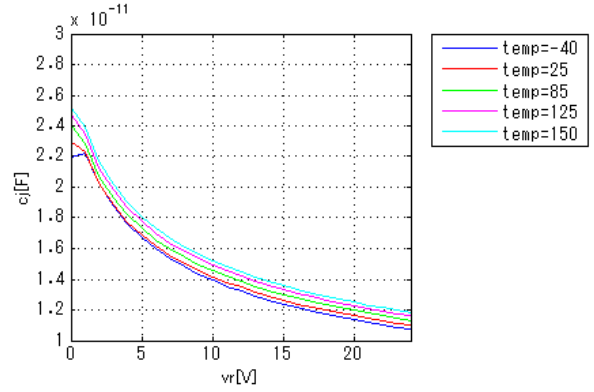
Simulation results are following.
 Explanatory notes — : simulated

IrVr[Temp]

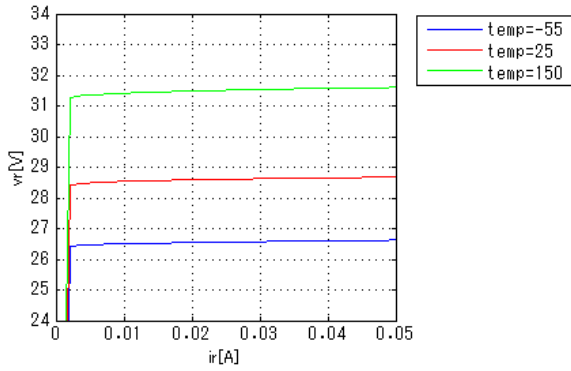


CjVr[Temp]

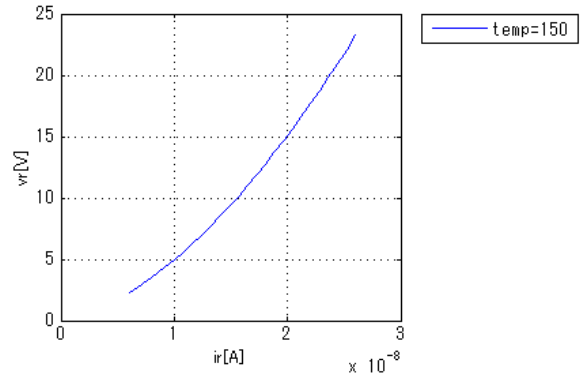
Freq = 1000000Hz



Vrlr[Temp]

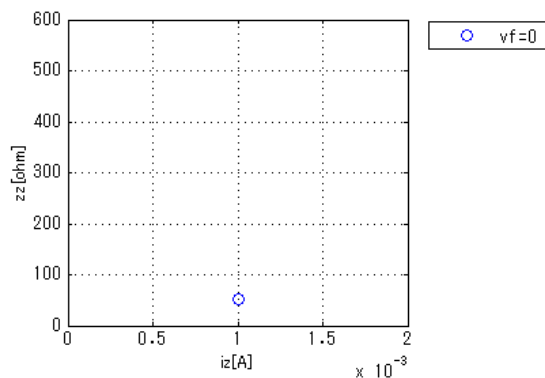


Vrlr[Temp]2



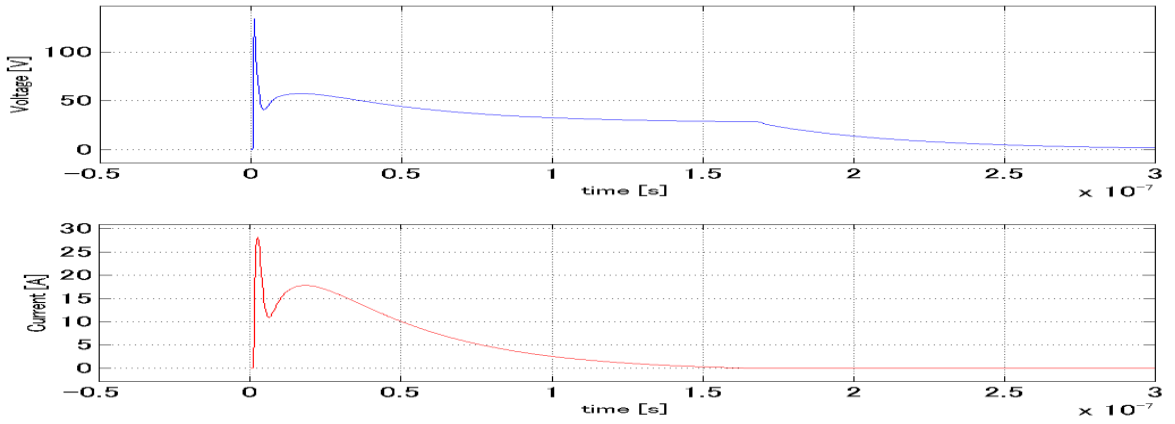
ZzIz

Iz_low = 90%, Iz_high = 110%



Simulation results are following.
Explanatory notes — : simulated

Surge Gun Waveform



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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/>