## LTspice Model Light Emitting Diode ROHM SML-010LTT87

### **Model Information**

 Model
 A macro model based on general SPICE diode model

 Call Name
 MDC\_SML-010LTT87\_LT

 Pin Assign
 1:A 2:C

 File List
 Model Library

 Model Report
 MDC\_SML-010LTT87\_LT01.lib

Verified Simulator Version Note

LTspice version XVII

#### References

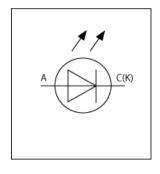
The information which was used for modeling is as follow:

Unknown SML-010LTT87 ROHM Co., Ltd. IfVf[Temp],IrVr[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. |       |
| Reverse Voltage | 0     | to | 4    | V     |
| Temperature     | -40   | to | 85   | deg C |



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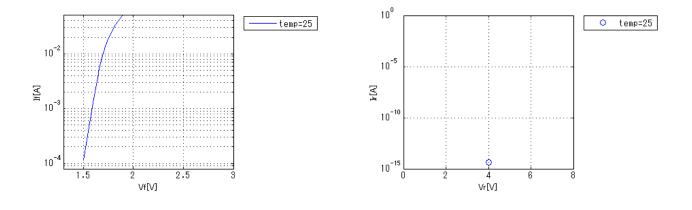
| Diode<br>Model Functions Table        | O : Implemented<br>× : Not Implemen<br>— : Not applicable |             |
|---------------------------------------|---|-------------|
| Functions                             | RANK  | Implemented |
| IF-VF(Temp)                           | 1   | 0           |
| IR-VR(Temp)                           | 1   | 0           |
| Capacitance                           | 1   | —           |
| Reverse recovery characteristics      | 1   | —           |
| Zz-Iz                                 | 1   | —           |
| Rectification characteristics(Bridge) | 1   | —           |
| Surge-Transient                       | 1   | 0           |
| tlp                                   | 1   | —           |



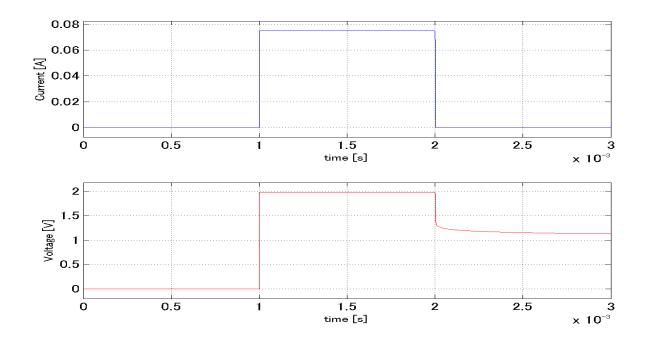
# Simulation results are following. Explanatory notes -: simulated



IrVr[Temp]



### Surge Current Waveform ( Forward tp=1ms )





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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/