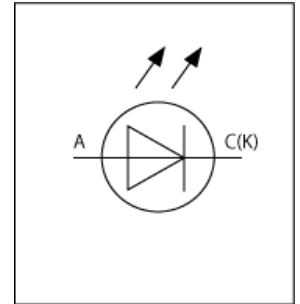


# PSpice Model

## Light Emitting Diode

### ROHM

### SML-010LTT87



#### Model Information

**Model** A macro model based on general SPICE diode model  
**Call Name** MDC\_SML-010LTT87\_PS  
**Pin Assign** 1:A 2:C  
**File List** Model Library MDC\_SML-010LTT87\_PS01.lib  
 Model Report MDC\_SML-010LTT87\_PS.pdf (this file)

**Verified Simulator Version** PSpice version 17.2  
**Note**

#### References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version Unknown
- Product name SML-010LTT87
- Company name ROHM Co., Ltd.
- Characteristics IfVf[Temp],IrrVr[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

Diode

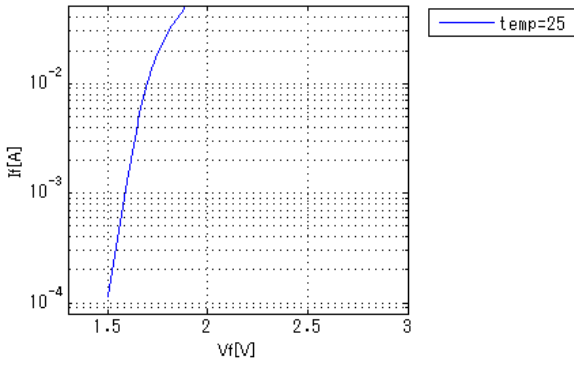
○ : Implemented  
× : Not Implemented  
— : Not applicable

**Model Functions Table**
**RANK=1**

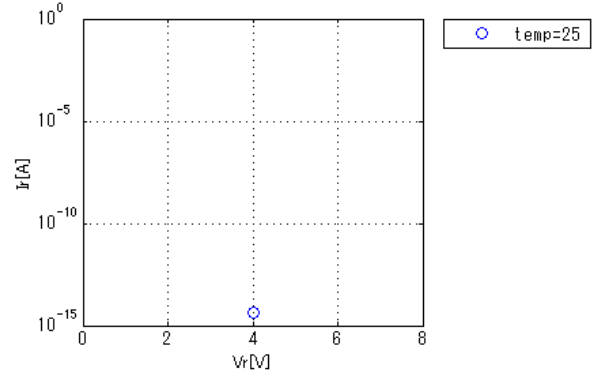
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	—
Reverse recovery characteristics	1	—
Zz-Iz	1	—
Rectification characteristics(Bridge)	1	—
Surge-Transient	1	○
tlp	1	—

Simulation results are following.  
 Explanatory notes — : simulated

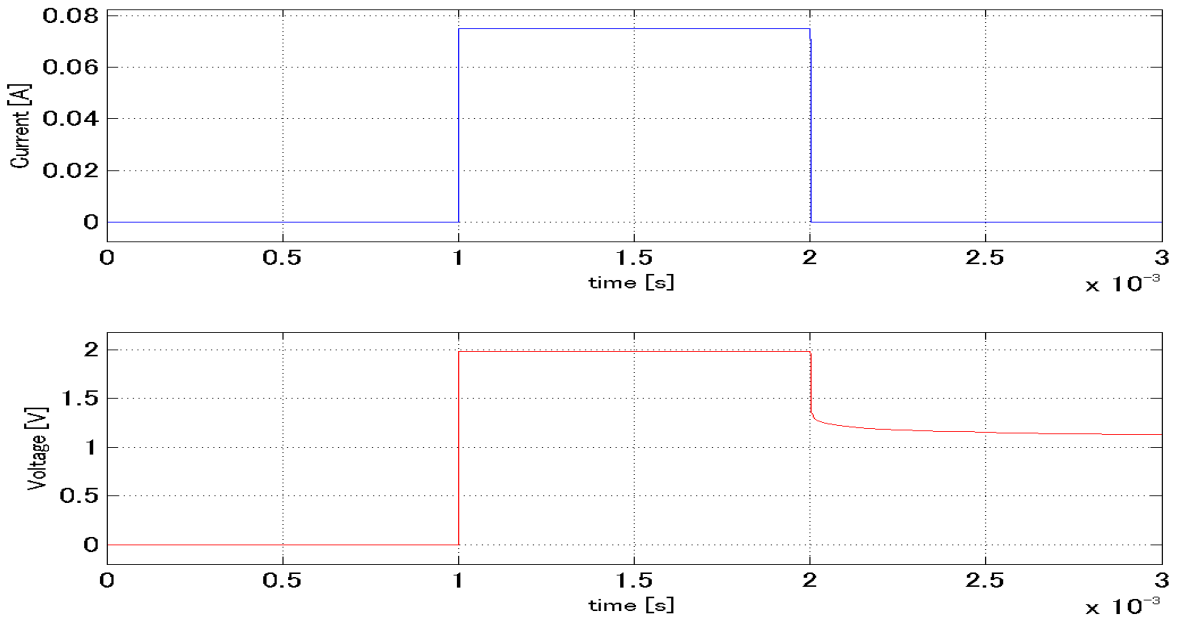
**IfVf[Temp]**



**IrVr[Temp]**



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



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