

# LTspice Model

## ESD Protection Diode

### VISHAY

### SMBJ3V3HE3



### Model Information

**Model** A macro model based on general SPICE diode model  
**Call Name** MDC\_SMBJ3V3HE3\_LT  
**Pin Assign** 1:A 2:C  
**File List** Model Library MDC\_SMBJ3V3HE3\_LT01.lib  
 Model Report MDC\_SMBJ3V3HE3\_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 13-Dec-13
- Product name SMBJ3V3HE3
- Company name Vishay Intertechnology, Inc.
- Characteristics IfVf[Temp],CjVr,BvTemp,IrVr(Breakdown)

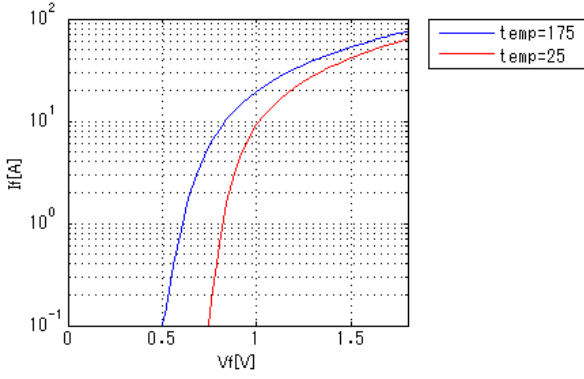
### Simulation Range

This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Forward Voltage	0	to	18	V
Reverse Voltage	0	to	8	V
Temperature	-65	to	175	deg C

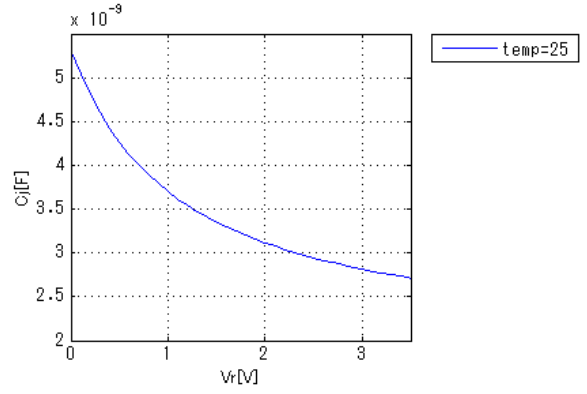
Simulation results are following.  
 Explanatory notes — : simulated

**IfVf[Temp]**

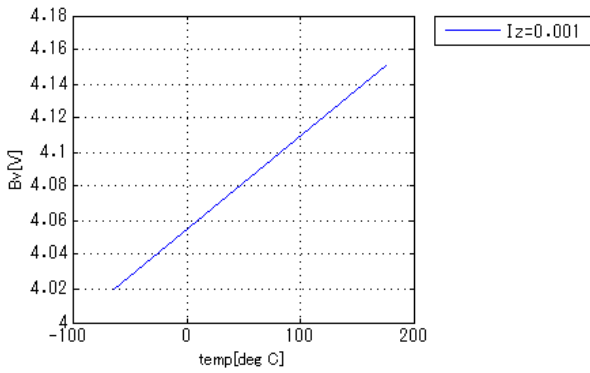


**CjVr**

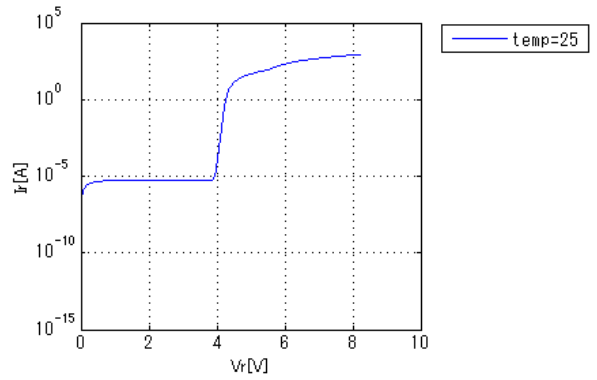
Freq. = 1MHz



**BvTemp**



**IrVr(Breakdown)**



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MoDeCH Inc.

Head Office

Location: Mitsuseimei Hachioji Bldg., 5-15 Yokoyama-cho, Hachioji-Shi, Tokyo 192-0081, Japan

Tel:+81-42-656-3360

E-Mail:[model-on-support@modech.co.jp](mailto:model-on-support@modech.co.jp)

URL:<http://www.modech.com/en/>