

# LTspice Model

## ESD Protection Diode

### VISHAY

### SM5A27THE3



### Model Information

**Model** A macro model based on general SPICE diode model  
**Call Name** MDC\_SM5A27THE3\_LT  
**Pin Assign** 1:A 2:C  
**File List** Model Library MDC\_SM5A27THE3\_LT01.lib  
 Model Report MDC\_SM5A27THE3\_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 24-Mar-15
- Product name SM5A27THE3
- Company name Vishay Intertechnology, Inc.
- Characteristics IrVr[Temp],IfVf[Temp],BvTemp,IrVr(Breakdown)

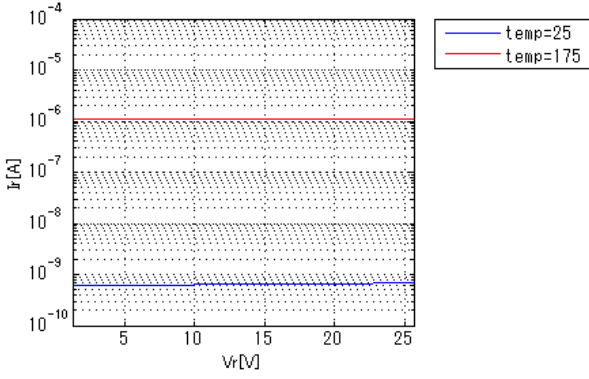
### Simulation Range

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

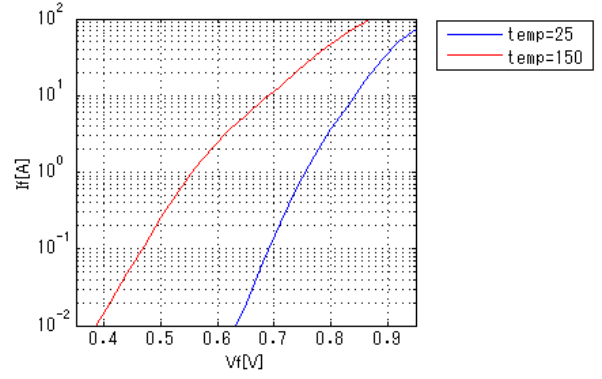
Item	Range			Unit
	Min.		Max.	
Forward Voltage	0	to	10	V
Reverse Voltage	0	to	54	V
Temperature	-55	to	175	deg C

Simulation results are following.  
 Explanatory notes — : simulated

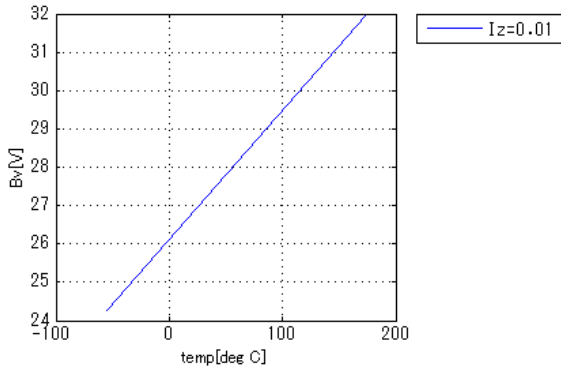
**IrVr[Temp]**



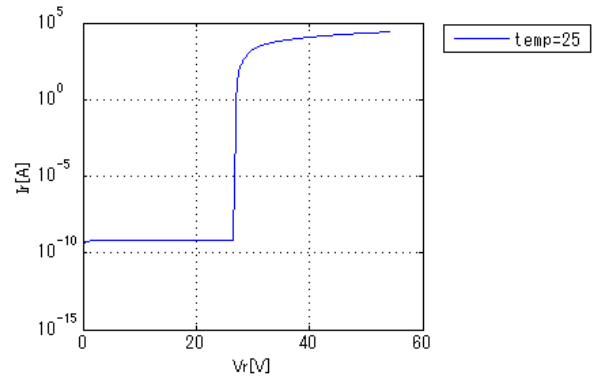
**IfVf[Temp]**



**BvTemp**



**IrVr(Breakdown)**



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