

# LTspice Model

## ESD Protection Diode

### VISHAY

### SMCJ45CAHE3



### Model Information

**Model** A macro model based on general SPICE diode model  
**Call Name** MDC\_SMCJ45CAHE3\_LT  
**Pin Assign** 1:A 2:C  
**File List** Model Library MDC\_SMCJ45CAHE3\_LT01.lib  
 Model Report MDC\_SMCJ45CAHE3\_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 10-Dec-13
- Product name SMCJ45CAHE3
- Company name Vishay Intertechnology, Inc.
- Characteristics IrVr(Breakdown)

### Simulation Range

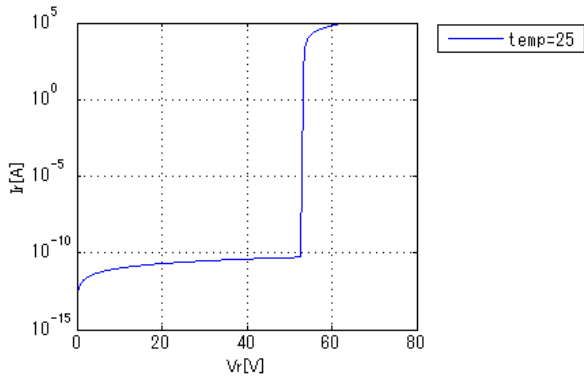
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

| Item            | Range |    |      | Unit  |
|-----------------|-------|----|------|-------|
|                 | Min.  |    | Max. |       |
| Reverse Voltage | 0     | to | 105  | V     |
| Temperature     | -55   | to | 150  | deg C |

Simulation results are following.

Explanatory notes — : simulated

### IrVr(Breakdown)



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