

# PSpice Model

## ESD Protection Diode

### Nexperia

### MMBZ10VAL



### Model Information

**Model** A macro model based on general SPICE diode model  
**Call Name** MDC\_MMBZ10VAL\_PS  
**Pin Assign** 1:C 2:C 3:A  
**File List** Model Library MDC\_MMBZ10VAL\_PS01.lib  
 Model Report MDC\_MMBZ10VAL\_PS.pdf (this file)

**Verified Simulator Version** PSpice version 16.6  
**Note**

### References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 10 December 2009 Rev. 02
- Product name MMBZ10VAL
- Company name Nexperia B.V.
- Characteristics CjVr, BvTemp, IrVr(Breakdown)

### Simulation Range

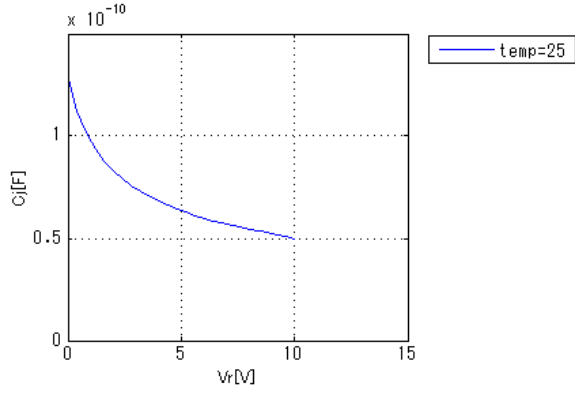
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Reverse Voltage	0	to	13	V
Temperature	-65	to	150	deg C

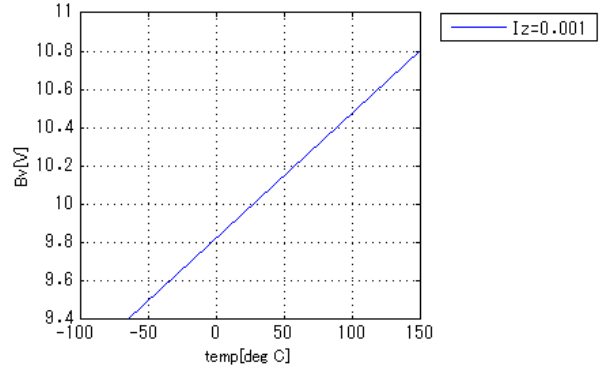
Simulation results are following.  
 Explanatory notes — : simulated

**CjVr**

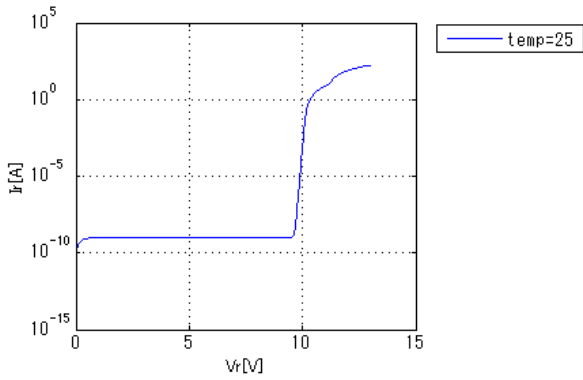
Freq. = 1MHz



**BvTemp**



**IrVr(Breakdown)**



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