

# PSpice Model

## High-speed switching diodes

### Nexperia

### BAV99W

#### Model Information

**Model** A macro model  
**Call Name** MDC\_BAV99W\_PS  
**Pin Assign** 1:anode(diode1) 2:cathode(diode2) 3:cathode(diode1),anode(diode2)  
**File List** Model Library MDC\_BAV99W\_PS01lib  
 Model Report MDC\_BAV99W\_PS.pdf(this file)  
**Verified Simulator Version** PSpice 17.2

#### Note

#### References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version Rev.8
- Product name BAV99W
- Company name Nexperia

[Characteristics listed]

- Characteristics IF-VF,IR-VR,Cd-VR,trr

#### Simulation Condition

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

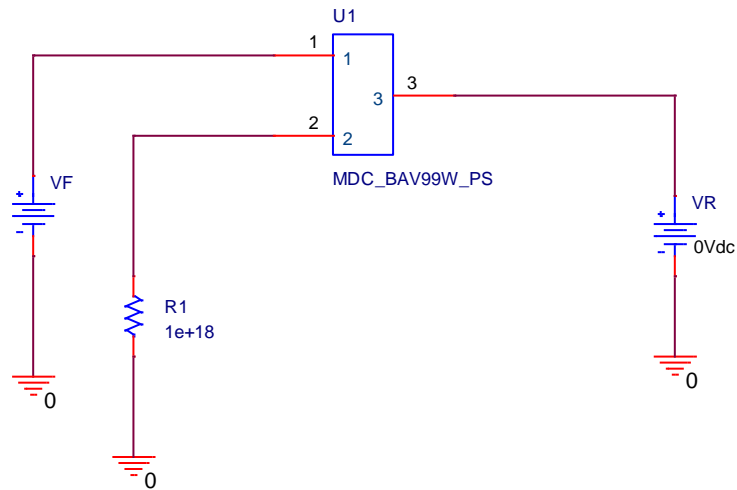
Item	Condition	Unit
Temperature	25	deg C

○ : Implemented  
 × : Not Implemented  
 — : Not applicable

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

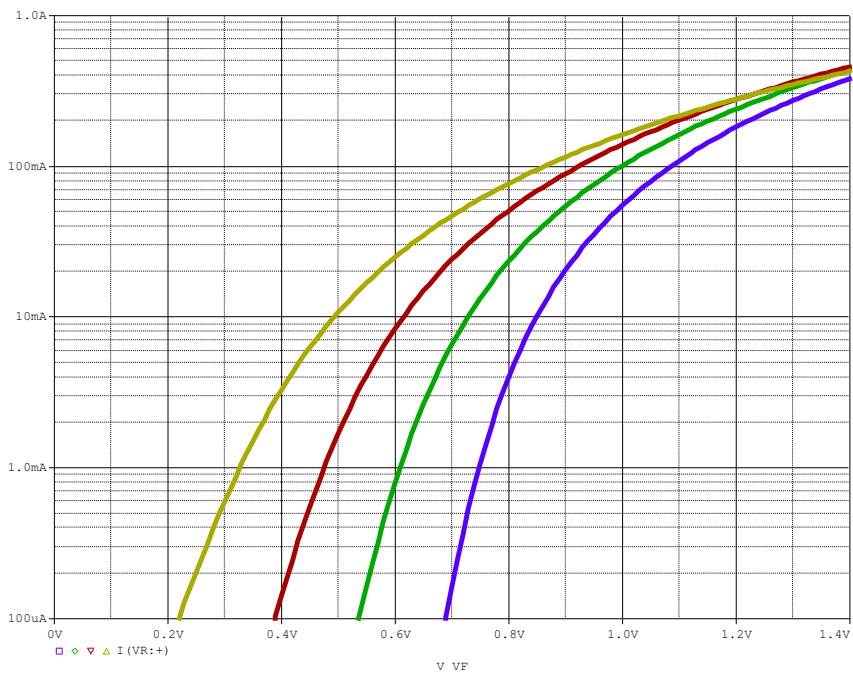
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Cd-VR	1	○
trr	1	○

IF-VF (Temp) Testbench  
 Referred to Data Sheet



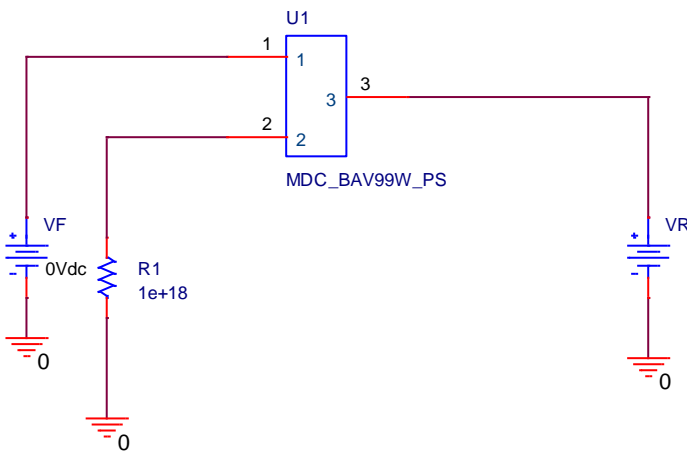
Simulation results are following.  
 Explanatory notes — : simulated

IF-VF (Temp)



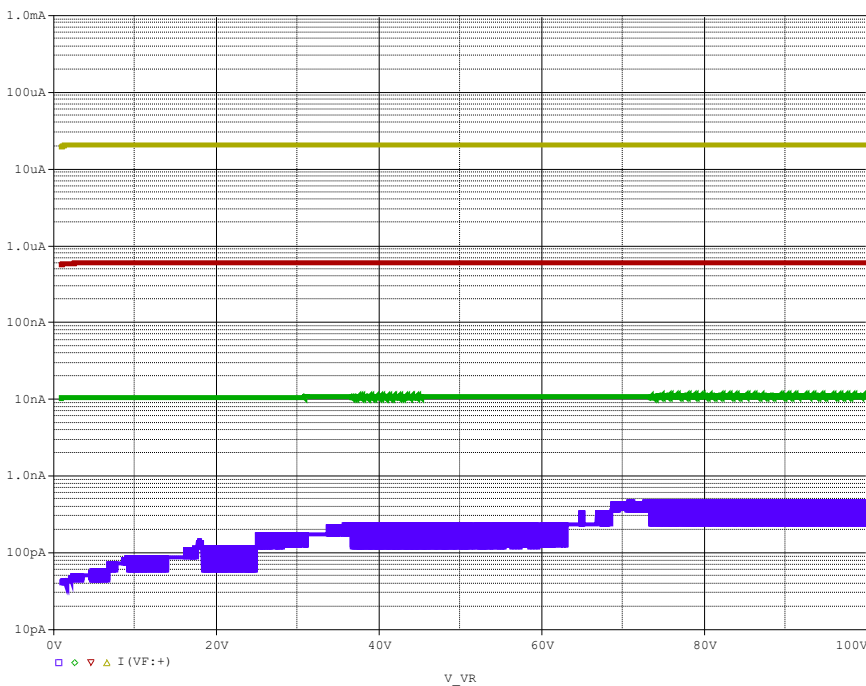
黄:150°C  
 赤:85°C  
 緑:25°C  
 青:-40°C

IR-VR (Temp) Testbench  
 Referred to Data Sheet



Simulation results are following.  
 Explanatory notes — : simulated

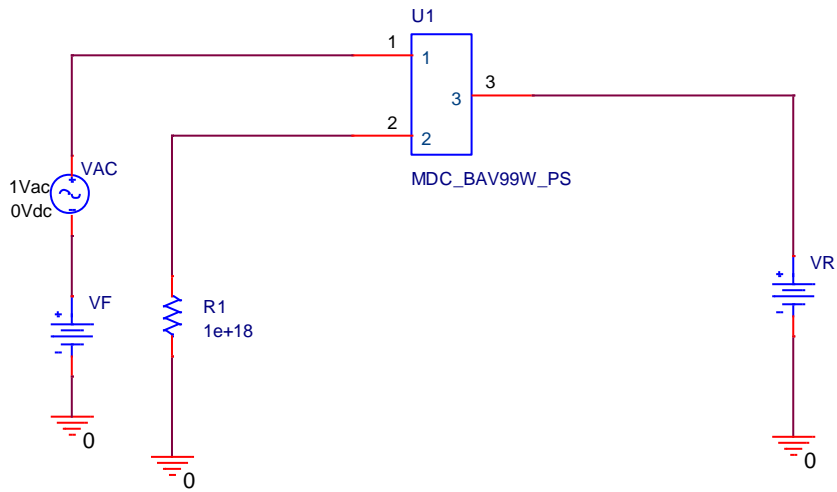
IR-VR (Temp)



黄:150°C  
 赤:85°C  
 緑:25°C  
 青:-40°C

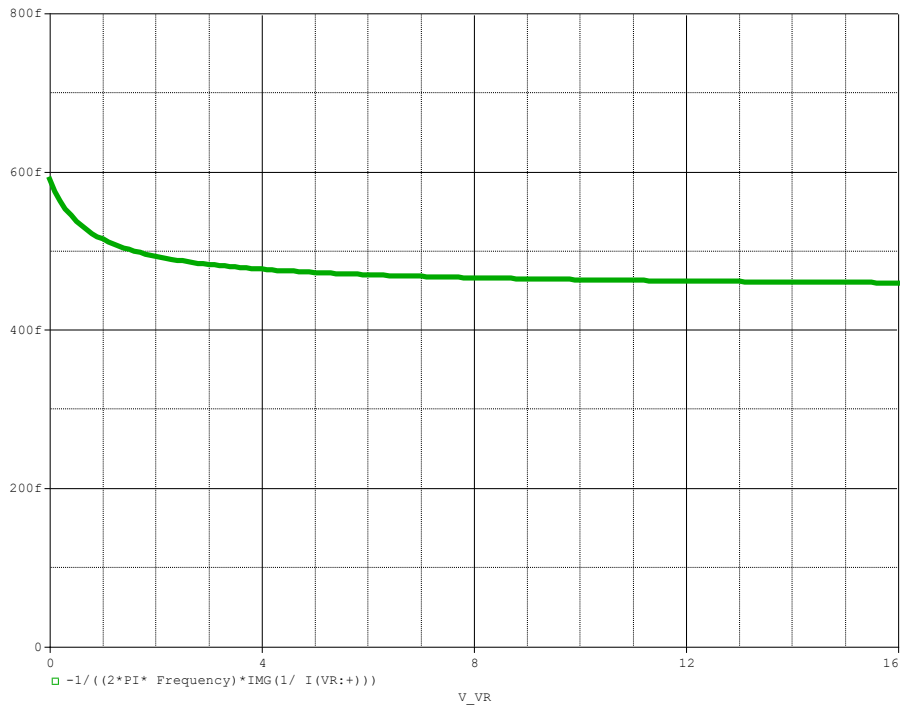
**Cd-VR Testbench**

**Referred to Data Sheet**



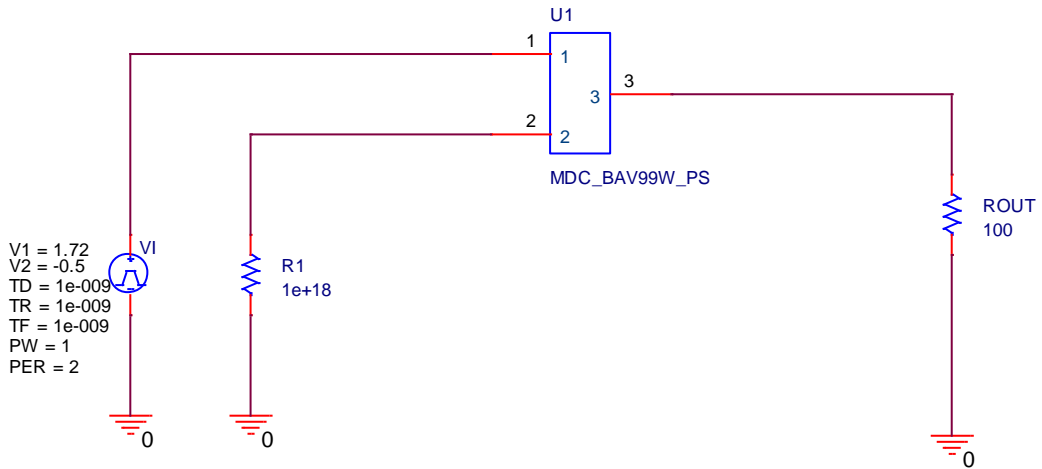
Simulation results are following.  
 Explanatory notes — : simulated

**Cd-VR**



trr Testbench

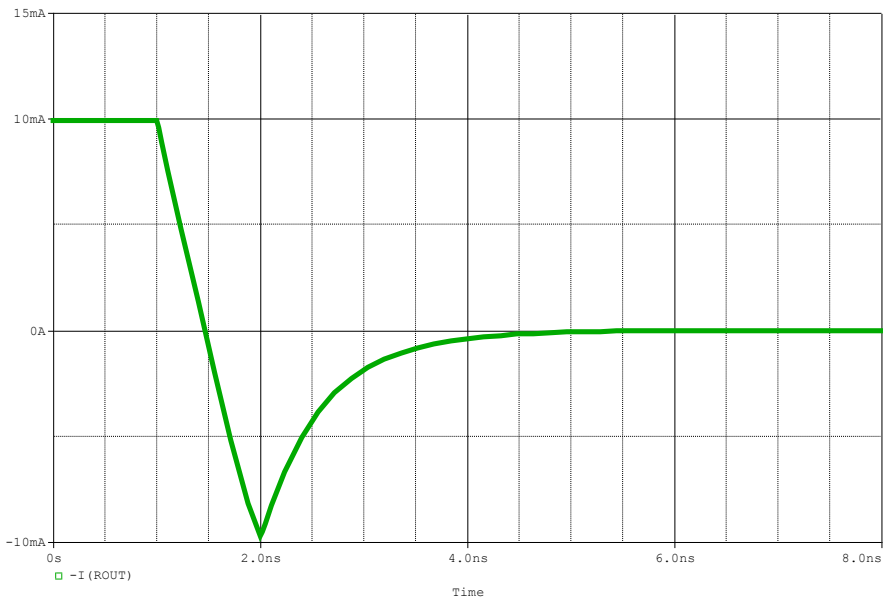
Referred to Data Sheet



Simulation results are following.  
Explanatory notes — : simulated

trr

Trr: 1.93nsec



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