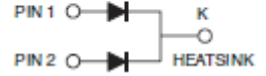


# PSpice Model Schottky Diode VISHAY POLYTECH V20PWM45C

SlimDPAK (TO-252AE)



## Model Information

<b>Model</b>	A macro model based on general SPICE diode model		
<b>Call Name</b>	MDC_V20PWM45C_PS		
<b>Pin Assign</b>	1:A1 2:A2 K:C		
<b>File List</b>	Model Library	MDC_V20PWM45C_PS01.lib	
	Model Report	MDC_V20PWM45C_PS.pdf (this file)	
<b>Verified Simulator Version</b>	PSpice version 17.2		
<b>Note</b>			

## References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 17-Mar-2022
- Product name V20PWM45C
- Company name Vishay Polytech Co., Ltd.
- Characteristics IrVr[Temp],CjVr,IfVf[Temp],SurgeCurrentWaveform

## 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	45	to	45	V
Temperature	-55	to	175	deg C

Diode

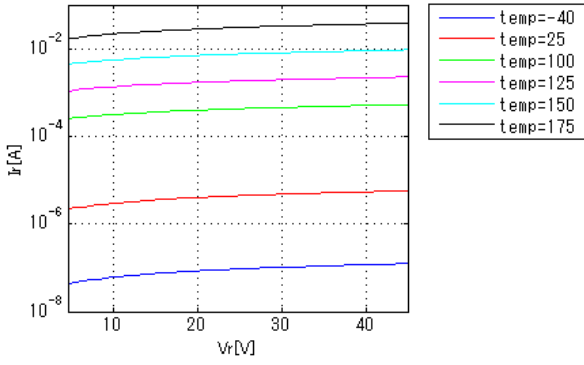
○ : Implemented  
 × : Not Implemented  
 — : Not applicable

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

Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	—
Zz-Iz	1	—
Rectification characteristics(Bridge)	1	—
Surge-Transient	1	○
tlp	1	—

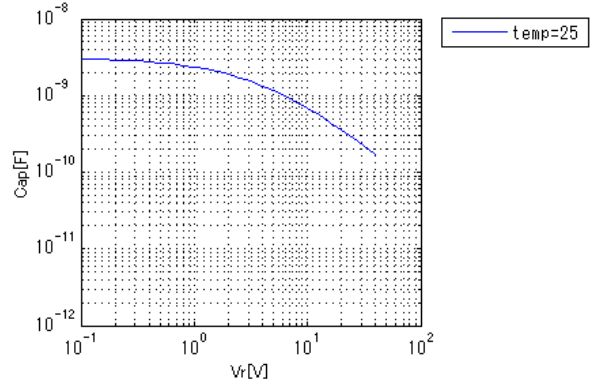
Simulation results are following.  
 Explanatory notes — : simulated

**IrVr[Temp]**

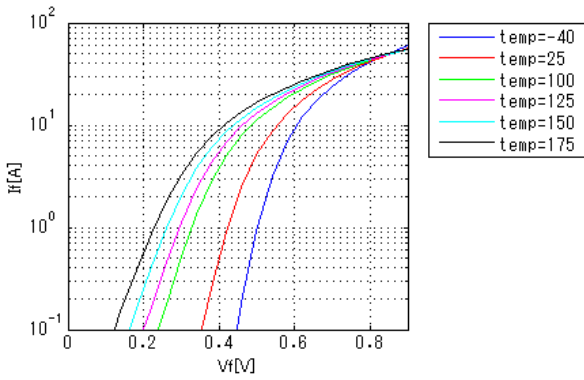


**CjVr**

Freq = 1000000Hz

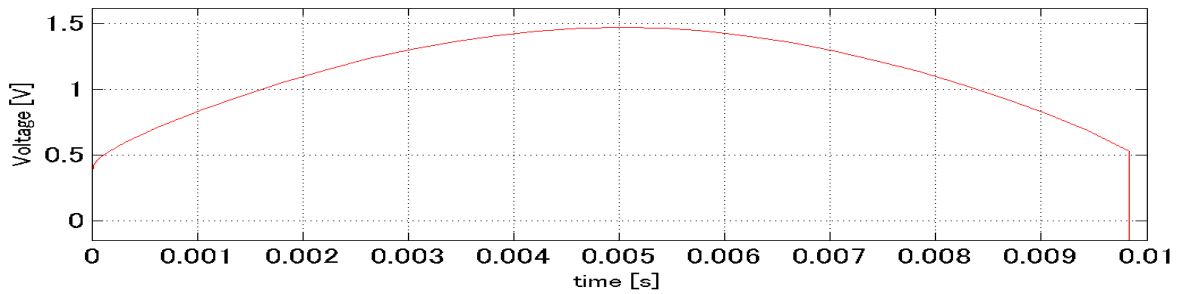
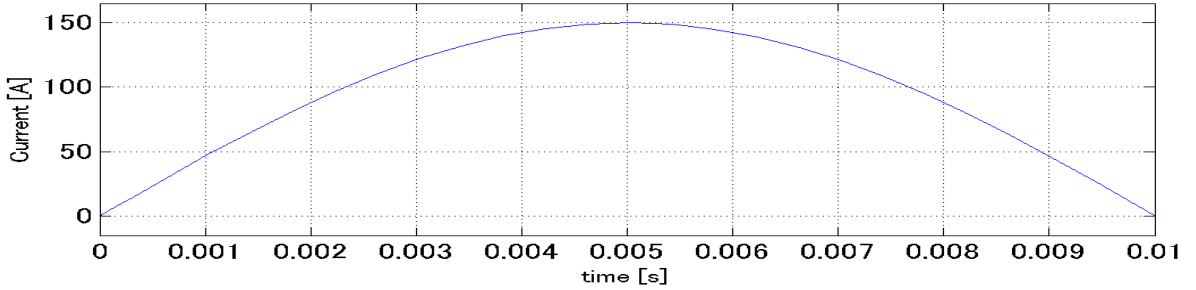


**IfVf[Temp]**



Simulation results are following.  
Explanatory notes — : simulated

**Surge Current Waveform ( Forward Sine Half 50Hz )**



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MoDeCH Inc.

Head Office

Location: 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/>