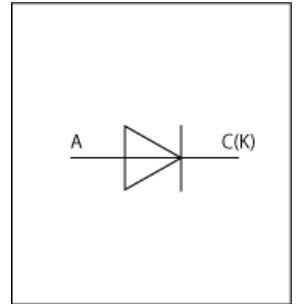


# PSpice Model

## Fast Recovery Diode

### ROHM

### RFN1LAM6S



### Model Information

**Model** A macro model based on general SPICE diode model  
**Call Name** MDC\_RFN1LAM6S\_PS  
**Pin Assign** 1:A 2:C  
**File List** Model Library MDC\_RFN1LAM6S\_PS01.lib  
 Model Report MDC\_RFN1LAM6S\_PS.pdf (this file)

**Verified Simulator Version** PSpice version 17.2  
**Note**

### References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 2017.04 - Rev.B
- Product name RFN1LAM6S
- Company name ROHM Co., Ltd.
- Characteristics IfVf[Temp],IrrVr[Temp],CjVr,Trrlflr,TrrWaveform

### 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	660	V
Temperature	-55	to	150	deg C

## Diode

○ : Implemented  
× : Not Implemented  
— : Not applicable

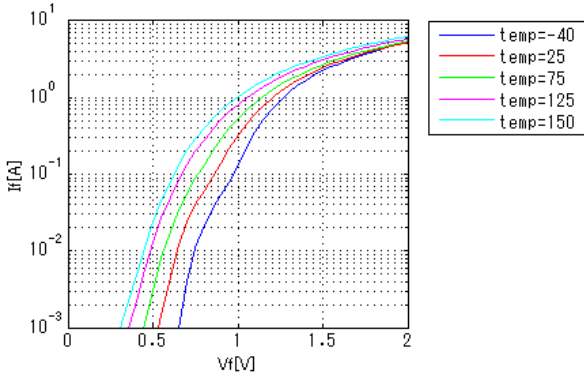
**Model Functions Table**

RANK=2

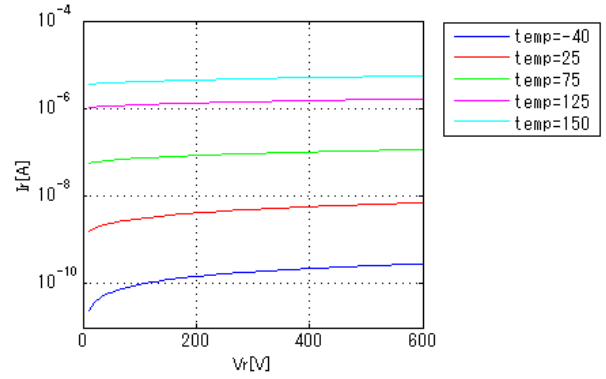
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	○
Rectification characteristics(Bridge)	1	—
Surge voltage-Transient	2	—

Simulation results are following.  
 Explanatory notes — : simulated

**IfVf[Temp]**

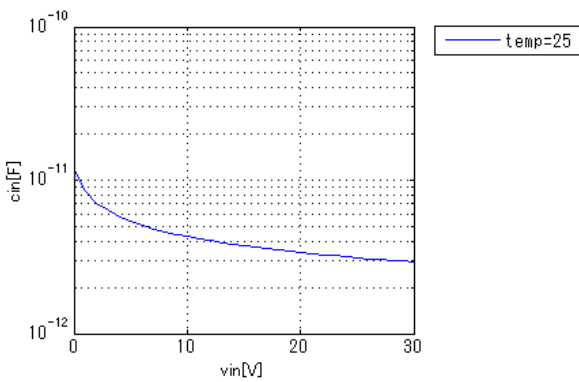


**IrVr[Temp]**



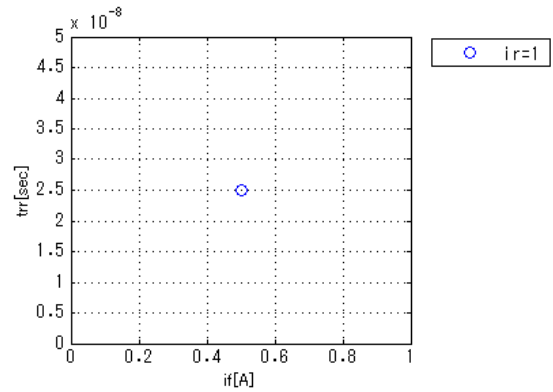
**CjVr**

Freq. = 1MHz



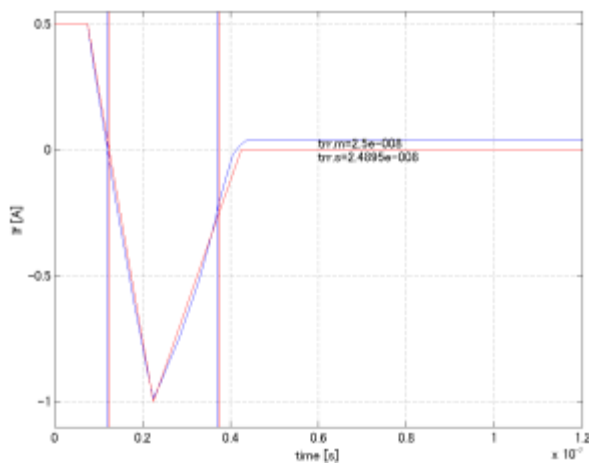
**TrrIfIr**

Irr = 0.25A, didt = 100A/us



**Trr Waveform (Red:Datasheet Blue:Simulation)**

Irr = 0.25A, didt = 100A/us, If = 0.5A



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