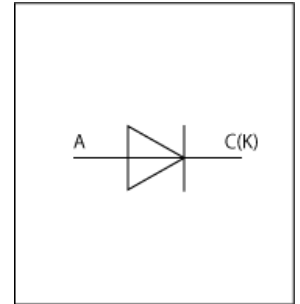


# LTspice Model

## Fast Recovery Diode

### ROHM

### RF101L4STE25



#### Model Information

**Model** A macro model based on general SPICE diode model  
**Call Name** MDC\_RF101L4STE25\_LT  
**Pin Assign** 1:A 2:C  
**File List** Model Library MDC\_RF101L4STE25\_LT01.lib  
 Model Report MDC\_RF101L4STE25\_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 2011.06 - Rev.B
- Product name RF101L4STE25
- Company name ROHM Co., Ltd.
- Characteristics IfVf[Temp],IrrVr[Temp],CjVr,Trrlflr,TrrWaveform,SurgeWaveform

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

## Diode

○ : Implemented  
× : Not Implemented  
— : Not applicable

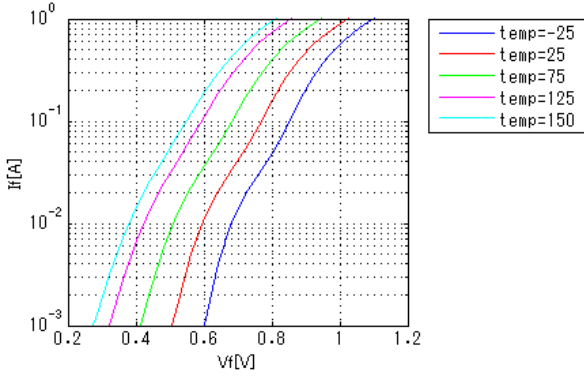
**Model Functions Table**

RANK=1

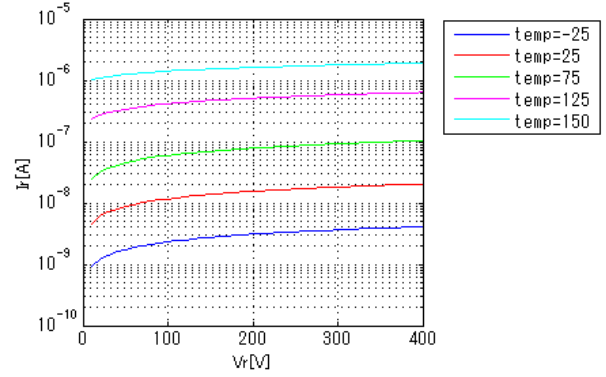
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
Reverse recovery characteristics	1	○
Rectification characteristics(Bridge)	1	—
Surge voltage-Transient	2	—

Simulation results are following.  
 Explanatory notes — : simulated

**IfVf[Temp]**

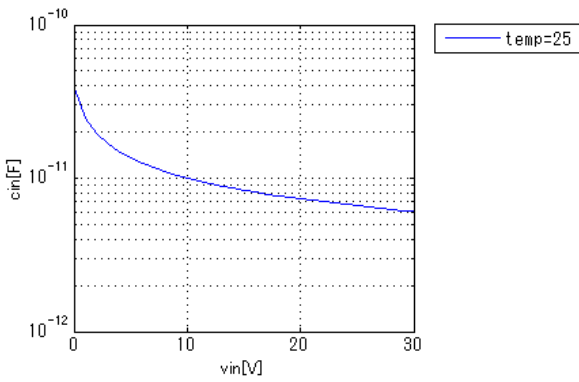


**IrVr[Temp]**



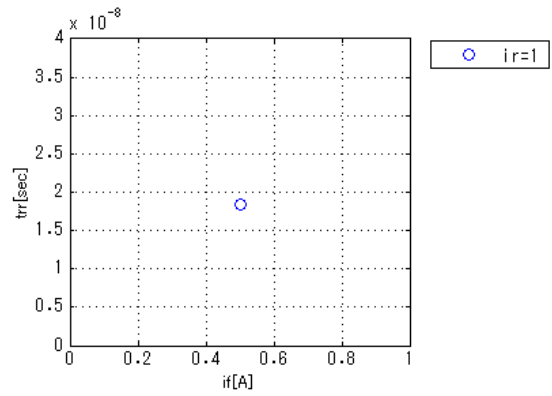
**CjVr**

Freq = 1000000Hz



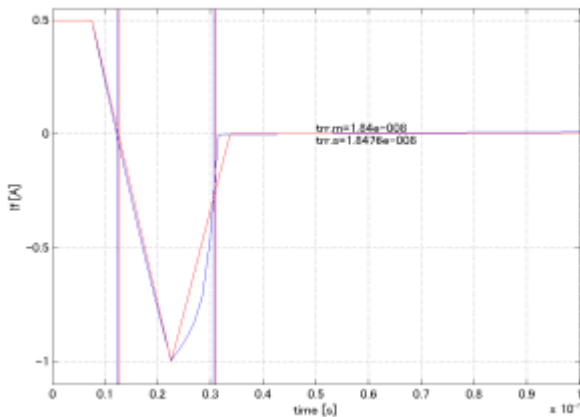
**TrrIfr**

irr = 0.25A, didt = 100A/us



**TrrWaveform ( Red : Datasheet Blue : Simulation )**

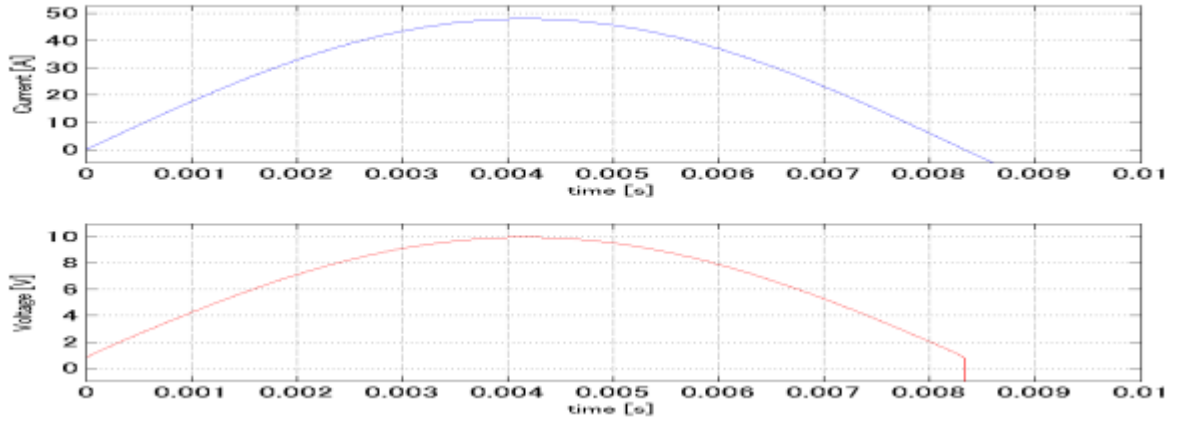
If = 0.5A, ir = 1.0A, irr = 0.25A, didt = 100A/us



Simulation results are following.

Explanatory notes — : simulated

### Surge Waveform ( 60Hz half sine wave )



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