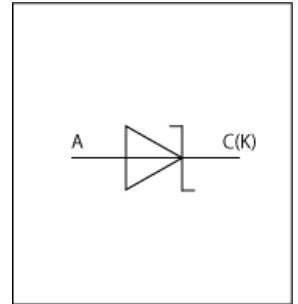


# LTspice Model

## Zener Diode

### SanKen

### SJPZ-N18



### Model Information

**Model** A macro model based on general SPICE diode model  
**Call Name** MDC\_SJPZ-N18\_LT  
**Pin Assign** 1:C 2:A  
**File List** Model Library MDC\_SJPZ-N18\_LT01.lib  
 Model Report MDC\_SJPZ-N18\_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 Rev.1.5 2021.03.09
- Product name SJPZ-N18
- Company name SanKen Electric Co., Ltd.
- Characteristics IfVf[Temp],IrVr[Temp],VrIr[Temp],BvTemp

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

## Diode

○ : Implemented  
× : Not Implemented  
— : Not applicable

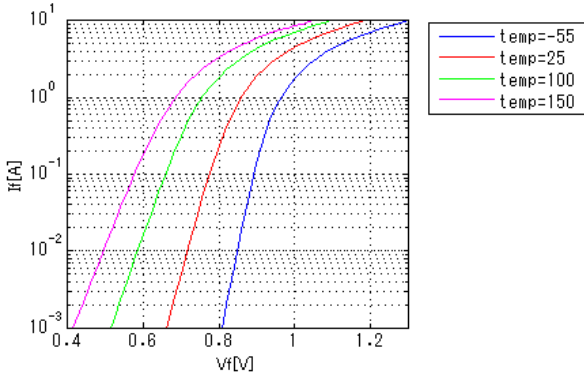
Model Functions Table

RANK=1

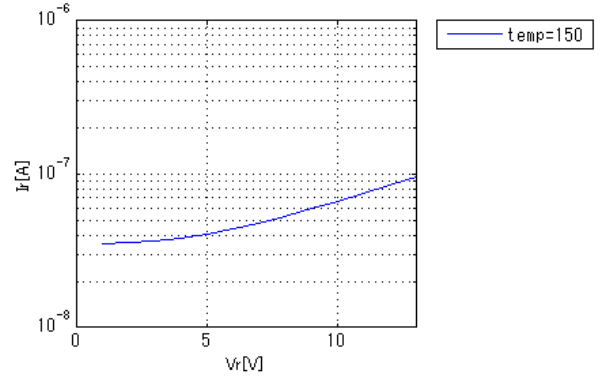
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	—
Reverse recovery characteristics	1	—
Rectification characteristics(Bridge)	1	—
Surge voltage-Transient	2	—

Simulation results are following.  
 Explanatory notes — : simulated

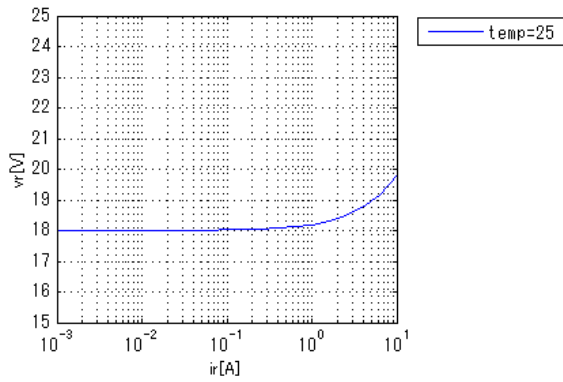
**IfVf[Temp]**



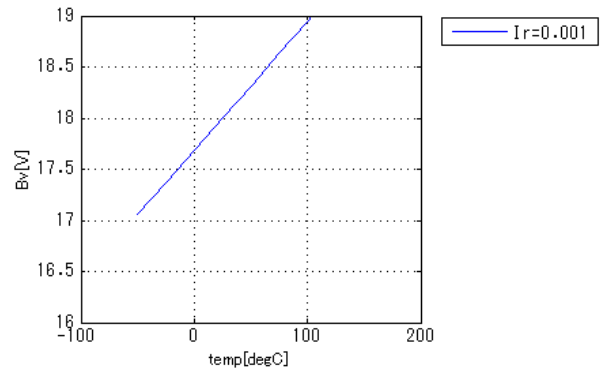
**IrVr[Temp]**



**VrIr[Temp]**



**BvTemp**



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