LTspice Model
Fast Recovery Rectifier Diode
Diodes
SF24-A5

Model Information

Model	A macro model
Call Name	MDC_SF24-A5_LT
Pin Assign	1:Port1 2:Port2
File List	Model Library MDC_SF24-A5_LT.lib
	Model Report MDC_SF24-A5_LT.pdf(this file)
Verified Simulator Version	LTspice XVII
Note	

References

The information which was used for modeling is as follow:

[Data Sheet]

- ●Date/Version Version: L2102
- ●Product name SF24-A5
- ●Company name Diodes Incorporated

[Characteristics listed]

●Characteristics

Reverse Current – Reverse Voltage
Forward Current – Forward Voltage
Junction Capacitor – Reverse Voltage

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	25,100,150	deg C

○ : Implemented
× : Not Implemented
— : Not applicable

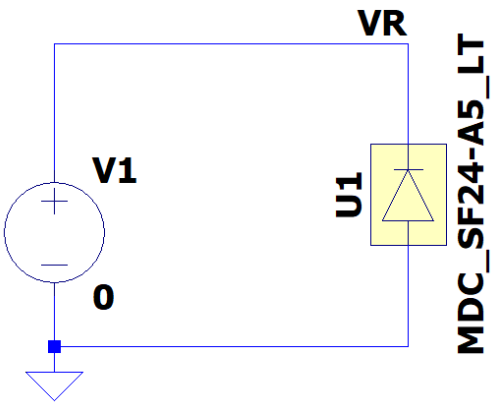
Model Functions Table

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

Reverse Current – Reverse Voltage

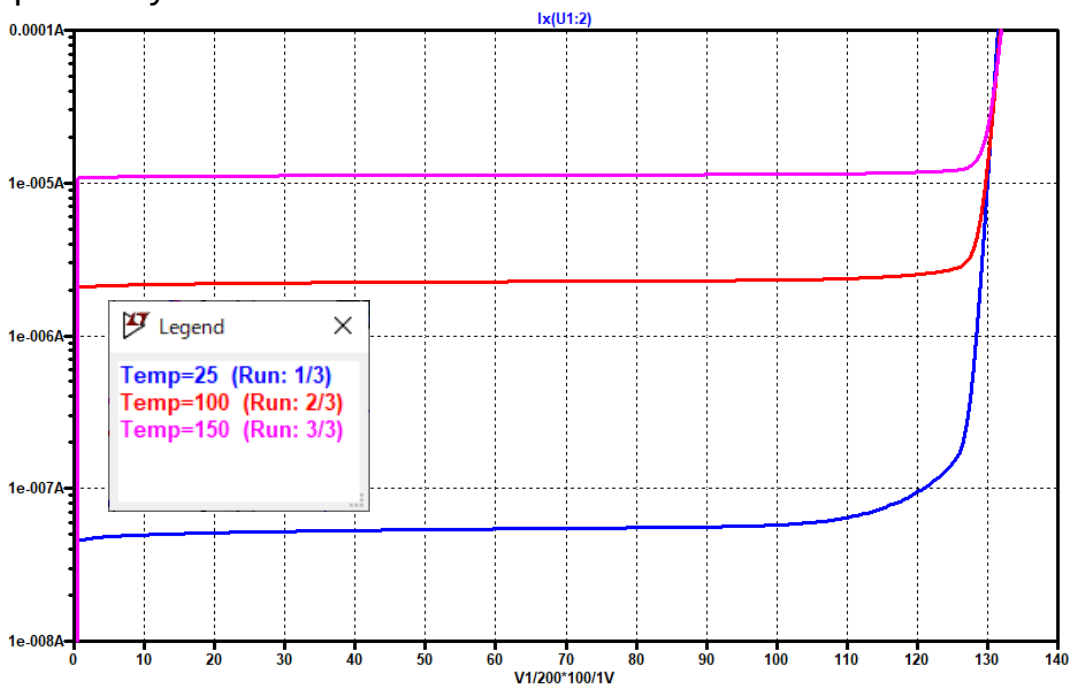
TestBench

```
.dc V1 0 280 1
.OPTION TNOM=25 GMIN=1e-15
.TEMP  25 100 150
```



Simulation results are following.

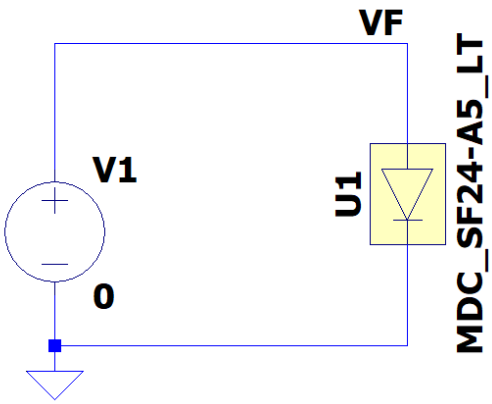
Explanatory notes — : simulated



Forward Current – Forward Voltage

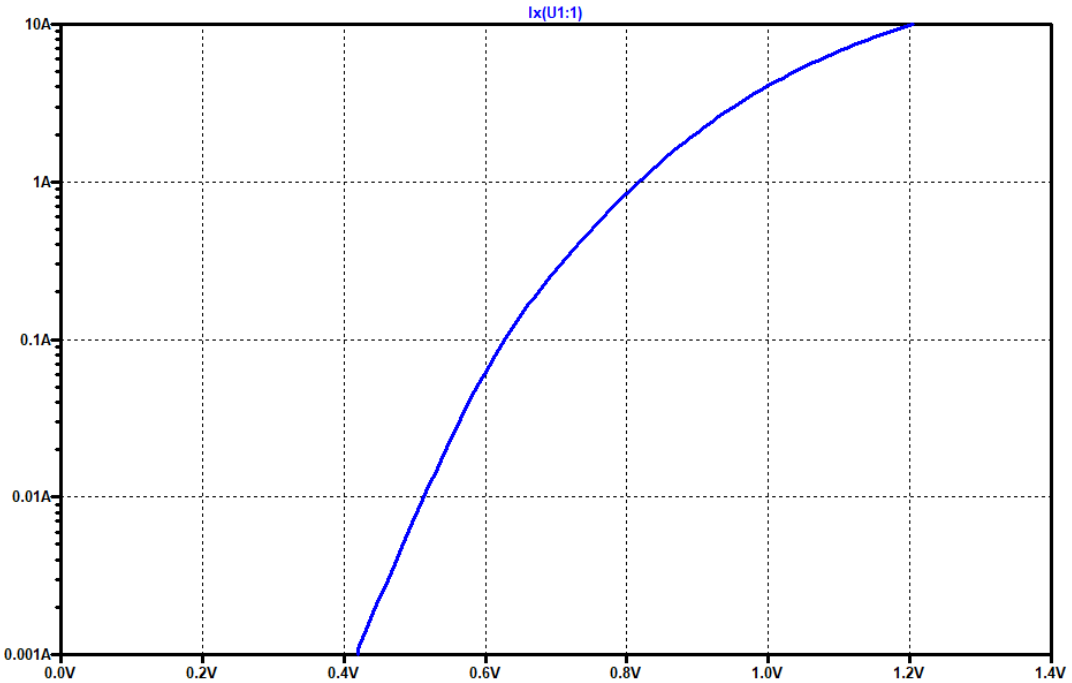
TestBench

```
.dc V1 0 1.4 0.01
.OPTION TNOM=25 GMIN=1e-15
.TEMP  25
```



Simulation results are following.

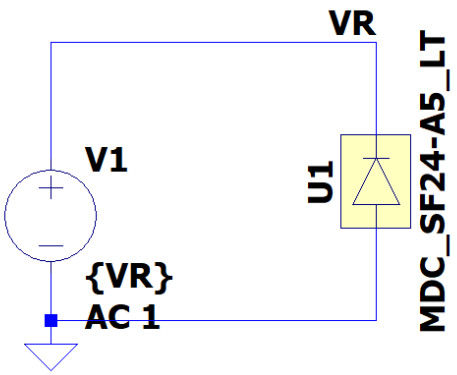
Explanatory notes — : simulated



Junction Capacitor – Reverse Voltage

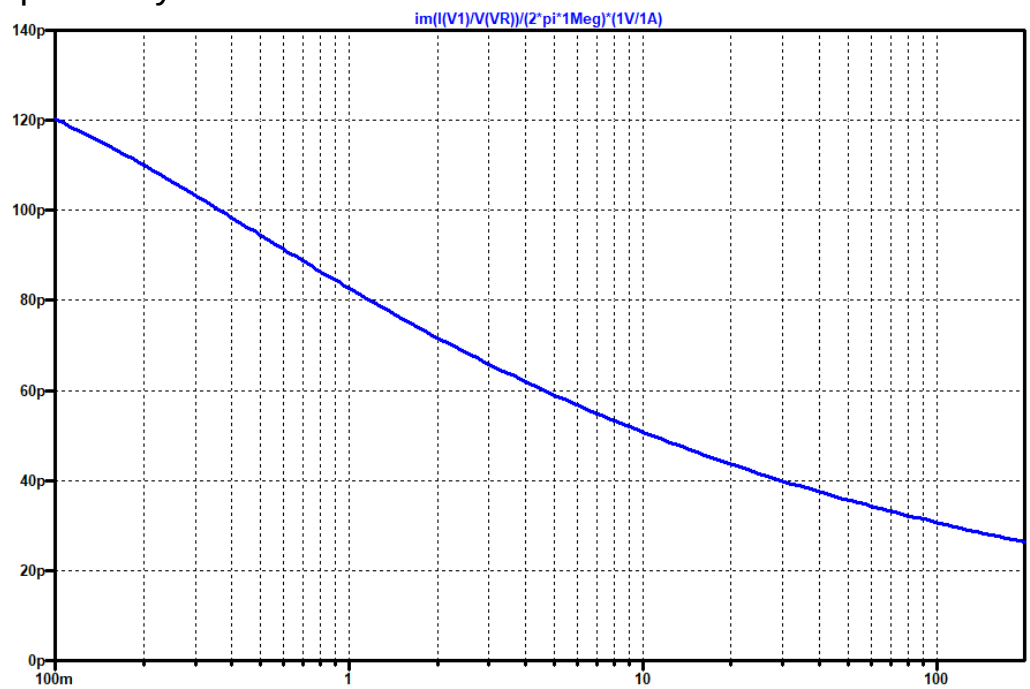
TestBench

```
.step dec param VR 0.1 200 10
.ac lin 1 1Meg 1Meg
.OPTION TNOM=25 GMIN=1e-15
.TEMP  25
```



Simulation results are following.

Explanatory notes — : simulated



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