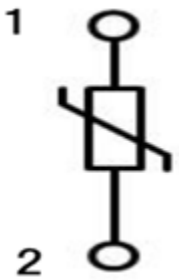
LTspice Model
Surge Absorber
SANKOSHA
SD4-90



Model Information

Model	An original macro model	
Call Name	MDC_SD4-90_LT	
Pin Assign	1:1 2:2	
File List	Model Library	MDC_SD4-90_LT01.lib
	Model Report	MDC_SD4-90_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 Unknown
- ●Product name SD4-90
- ●Company name SANKOSHA Corporation
- ●Characteristics IfVf[Temp],IrVr[Temp],CjVr,DcFiringPotential,SurgeCurrent

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.	
DC firing potential	100	to	100	V
Temperature	-40	to	90	deg C

Surge Absorber

○ : Implemented
× : Not Implemented
— : Not applicable

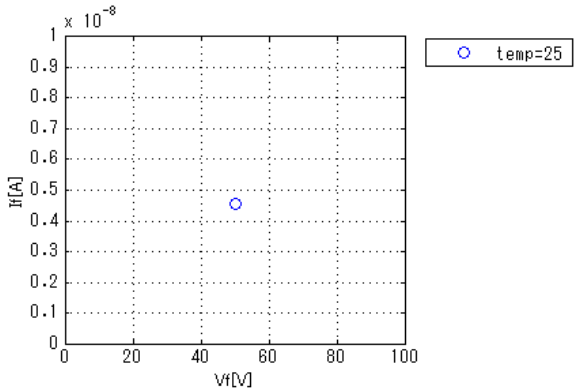
Model Functions Table

	RANK=1	
Functions	**RANK**	**Implemented**
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
DC firing potential	1	○
Surge voltage-Transient	1	○

Simulation results are following.
Explanatory notes — : simulated

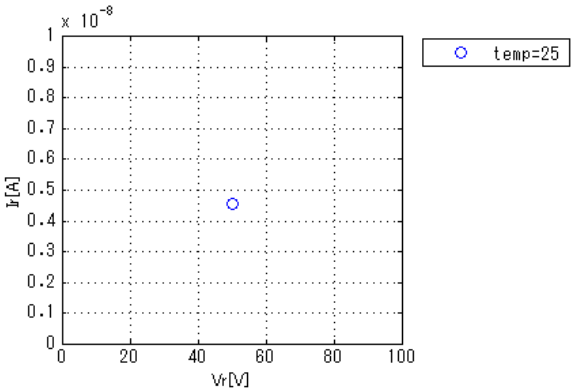
IfVf[Temp]

GMIN = 1E-15



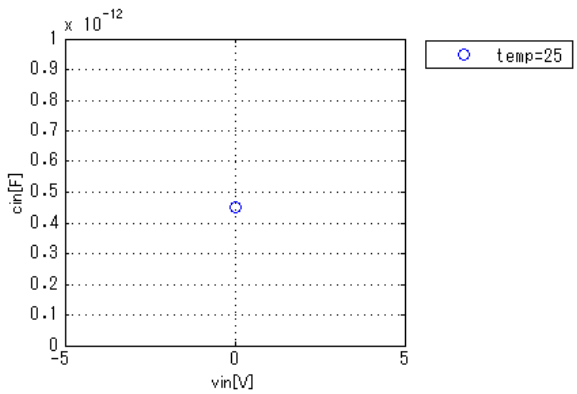
IrVr[Temp]

GMIN = 1E-15



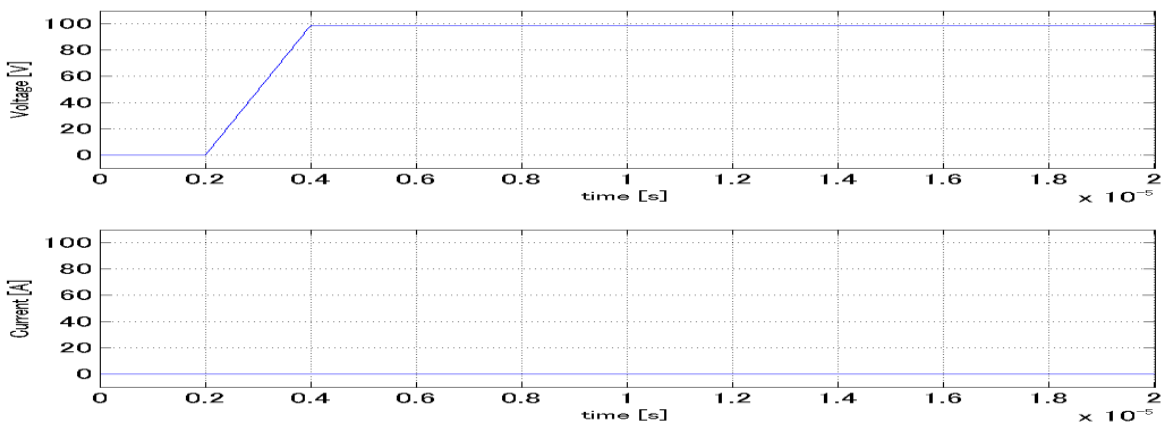
CjVr

Freq = 1000000Hz



DC Firing Potential (not reached at 100*0.99V)

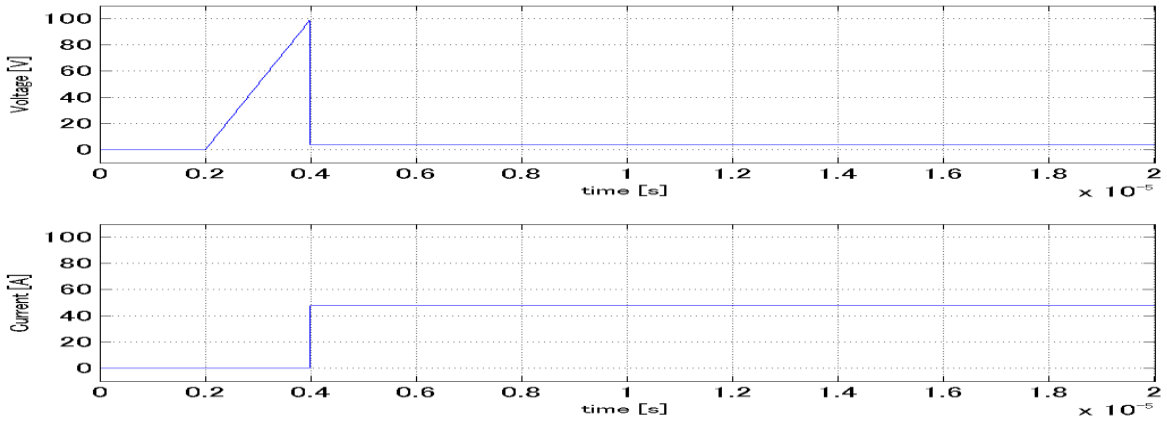
Road = 2 ohm



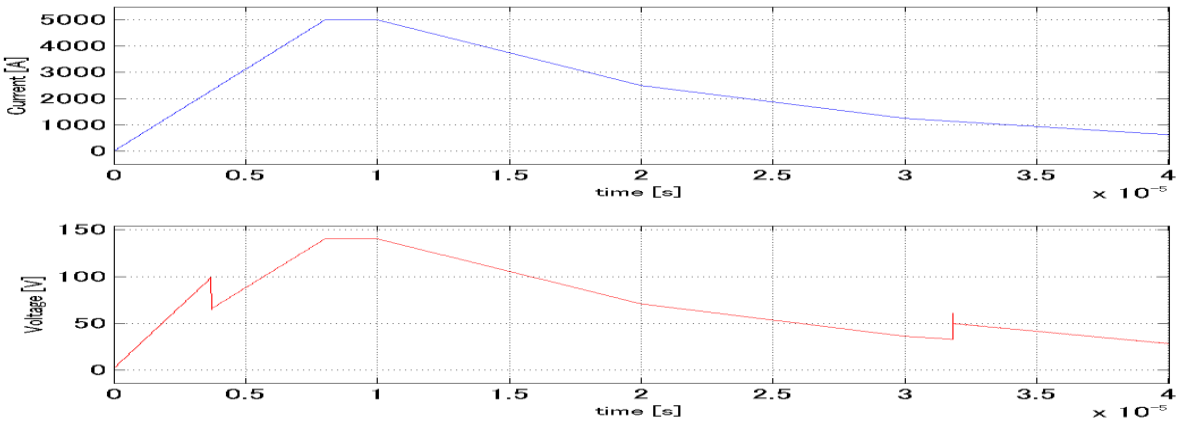
Simulation results are following.
Explanatory notes — : simulated

DC Firing Potential (reached at 100V)

Road = 2 ohm



Surge Current



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