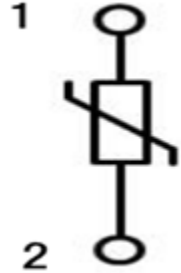


PSpice Model

Surge Absorber

OKAYA

R5K-900P45U



Model Information

Model An original macro model
Call Name MDC_R5K-900P45U_PS
Pin Assign 1:1 2:2
File List Model Library MDC_R5K-900P45U_PS01.lib
 Model Report MDC_R5K-900P45U_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 Unknown
- Product name R5K-900P45U
- Company name OKAYA ELECTRIC INDUSTRIES CO.,LTD.
- Characteristics IfVf[Temp],Irvr[Temp],CjVr,DcFiringPotential,SurgeCurrent,SurgeVoltage

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	90	to	90	V
Temperature	-20	to	80	deg C

Surge Absorber

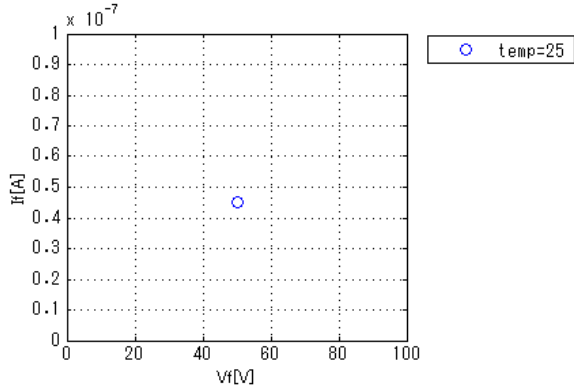
○ : Implemented
 × : Not Implemented
 — : Not applicable

Model Functions Table
RANK=1

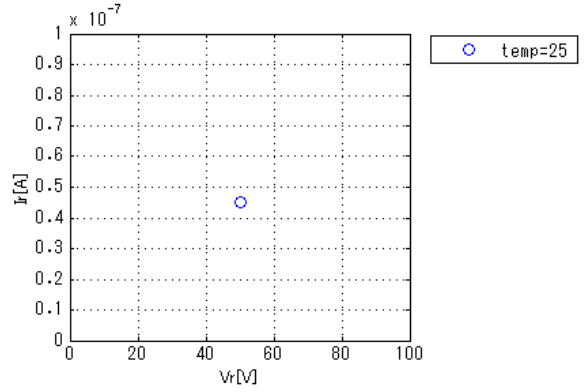
Functions	RANK	Implemented
IF-VF(Temp)	1	○
IR-VR(Temp)	1	○
Capacitance	1	○
DC firing potential	1	○
Surge voltage-Transient	1	○

Simulation results are following.
 Explanatory notes — : simulated

IfVf[Temp]

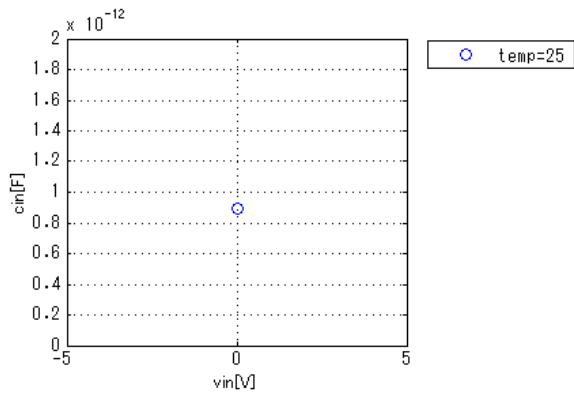


IrVr[Temp]



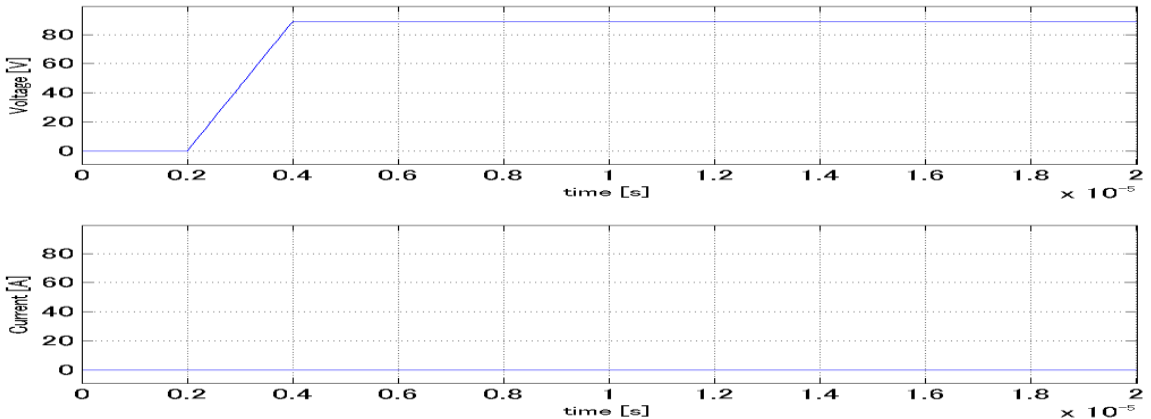
CjVr

Freq = 1000000Hz



DC Firing Potential (not reached at 90*0.99V)

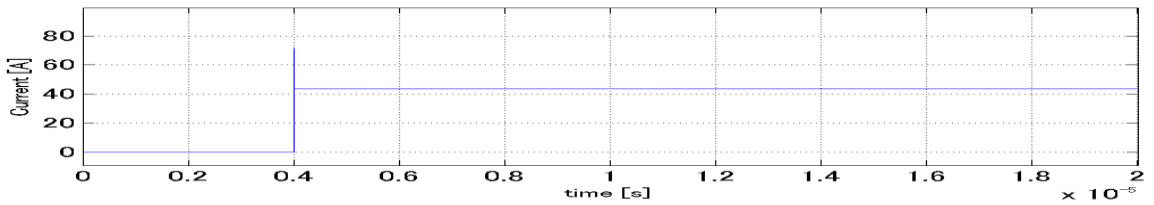
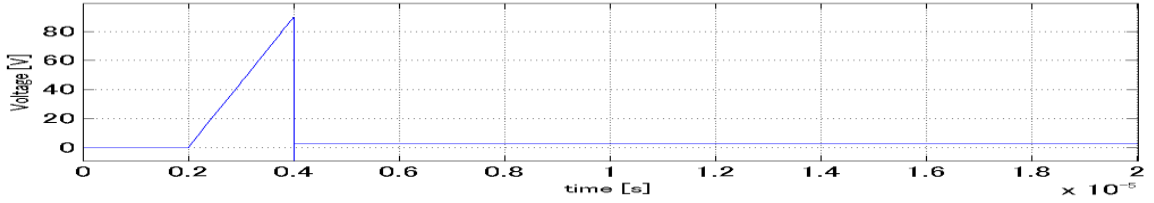
Rload = 2 ohm



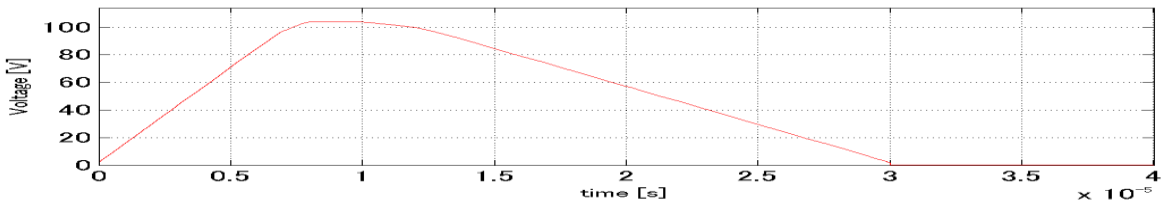
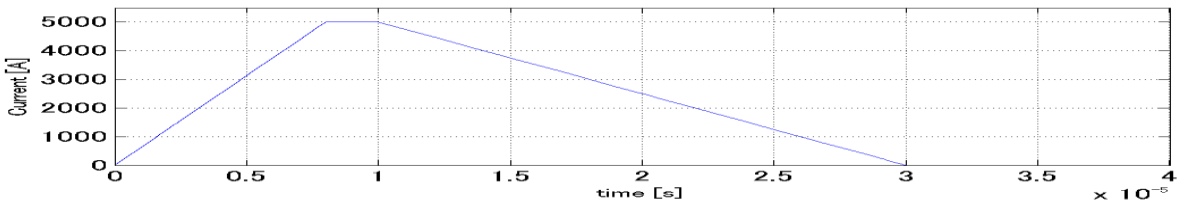
Simulation results are following.
 Explanatory notes — : simulated

DC Firing Potential (reached at 90V)

Rload = 2 ohm

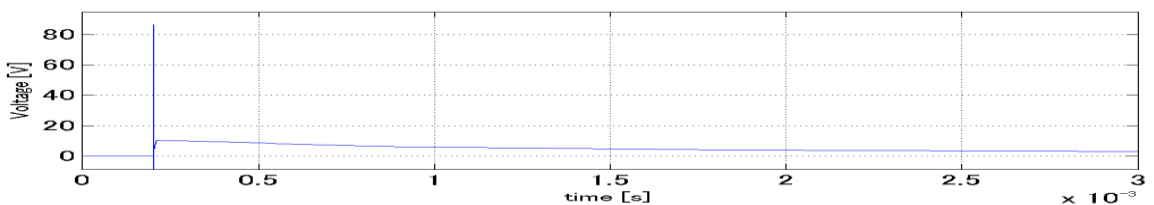
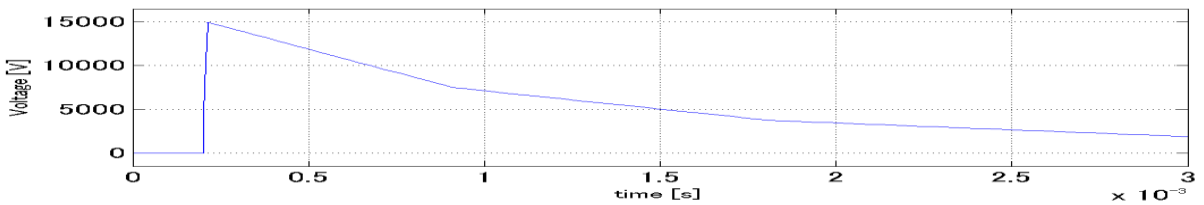


Surge Current



Surge Voltage

UP R=1Gohm DOWN DUT



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MoDeCH Inc.

Head Office

Location: 5-15 Yokoyama-cho, Hachioji-Shi, Tokyo 192-0081, Japan

Tel:+81-42-656-3360

E-Mail: model-on-support@modech.co.jp

URL: <http://www.modech.com/en/>