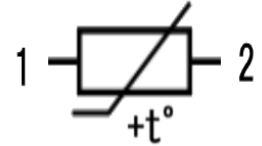


PSpice Model

PTC Thermistor

COPAL

PRCP-NSMF150-2E



Model Information

Model	A macro model		
Call Name	MDC_PRCP-NSMF150-2E_PS		
Pin Assign	1:1 2:2		
File List	Model Library	MDC_PRCP-NSMF150-2E_PS01.lib	
	Model Report	MDC_PRCP-NSMF150-2E_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	PRCP-NSMF150-2E
●Company name	NIDEC COPAL CORPORATION
●Characteristics	ResTemp[I _f],I _f V _f [Temp],TripCurrentWaveform

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.	
Temperature	-40	to	85	deg C

Thermistor

○ : Implemented
 × : Not Implemented
 — : Not applicable

Model Functions Table

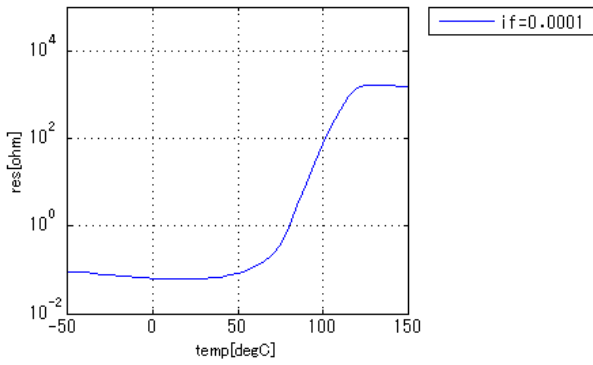
RANK=1

Functions	RANK	Implemented
Resistance-Temperature	1	○
Current-Voltage	1	○
Thermal time constant	1	○

Simulation results are following.
 Explanatory notes — : simulated

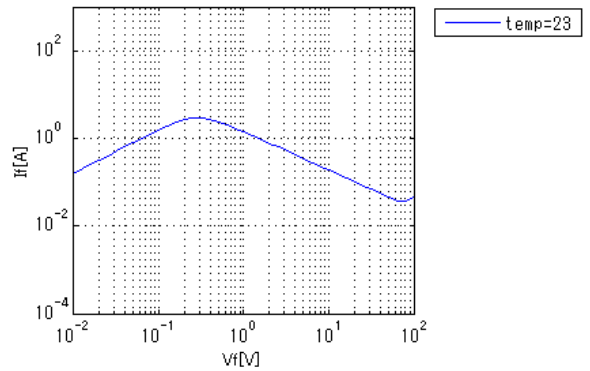
ResTemp[If]

R Min = 0.03ohm R1 Max = 0.13ohm (at 23degC)



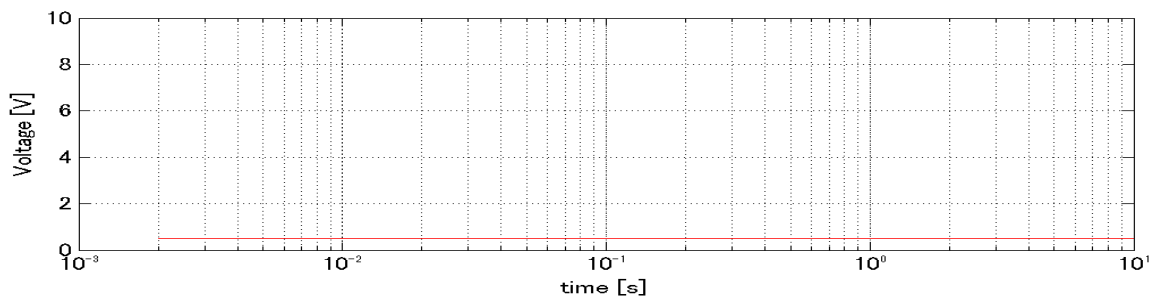
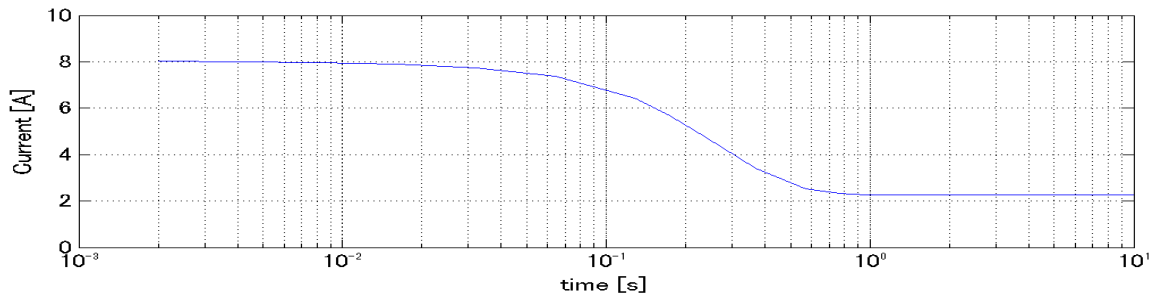
IfVf[Temp]

Itrip = 3.0A (at 23degC)



Trip Current Waveform

Current = 8.0A, Trip Time = 0.30sec (at Current*1/2)



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