

PSpice Model Photocoupler IC Output RENESAS PS9121

Model Information

Model An original macro model
Call Name MDC_PS9121_PS
Pin Assign 1:Anode 3:Cathode 4:GND 5:VO 6:VCC
File List Model Library MDC_PS9121_PS01.lib
 Model Report MDC_PS9121_PS.pdf (this file)

Verified Simulator Version PSpice version 16.6
Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 5
- Product name PS9121
- Company name Renesas Electronics Corporation
- Characteristics IfVf[Temp], IfhI[Temp][Vcc], IccI[Temp][Vcc], Icch[Temp][Vcc], SwitchingTemp, SwitchingIf

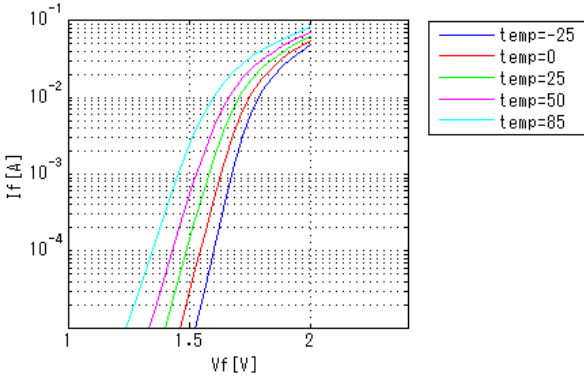
Simulation Range

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	-55	to	125	deg C

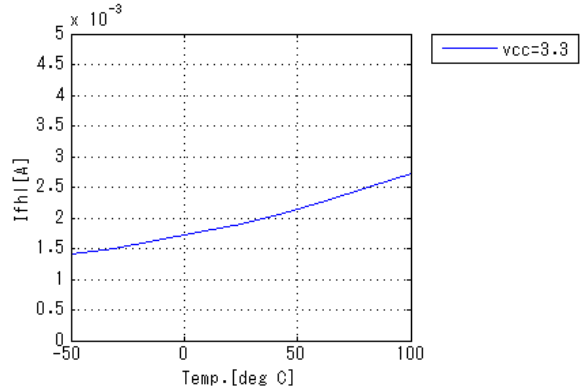
Simulation results are following.
 Explanatory notes — : simulated

IfVf[Temp]



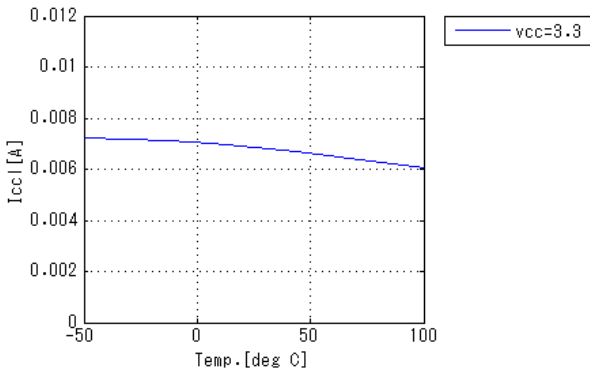
IfhI[Temp][Vcc]

Io = 0.001A



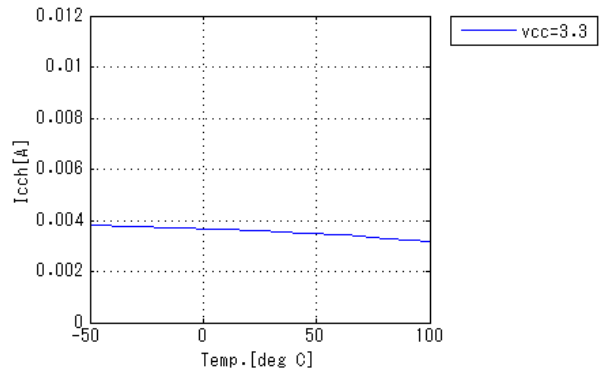
IccI[Temp][Vcc]

If = 0.01A



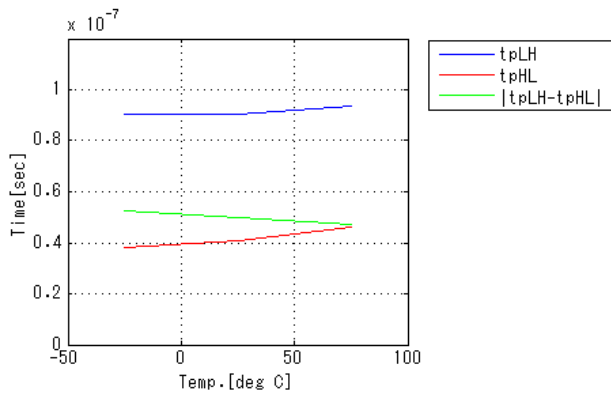
Icch[Temp][Vcc]

If = 0A



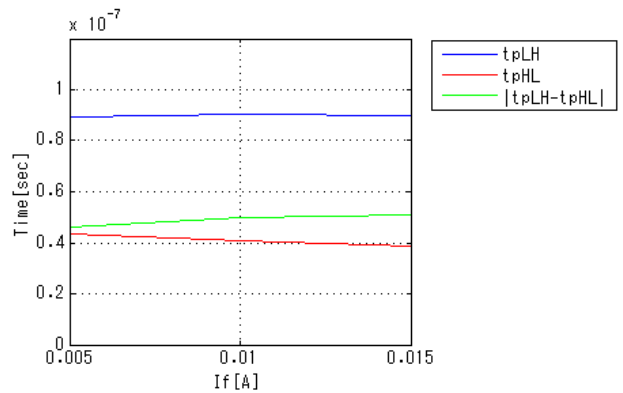
SwitchingTemp

Freq. = 25000Hz, Duty = 50%, If = 0.0075A, Vcc = 3.3V



SwitchingIf

Freq. = 25000Hz, Duty = 50%, Vcc = 3.3V



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MoDeCH Inc.

Head Office

Location: Mitsuseimei Hachioji Bldg., 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/>