

PSpice Model Photocoupler Tr. Output ON FODM2701

Model Information

Model An original macro model
Call Name MDC_FODM2701_PS
Pin Assign 1:Anode 2:Cathode 3:Emitter 4:Collector
File List Model Library MDC_FODM2701_PS01.lib
 Model Report MDC_FODM2701_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 1.7
- Product name FODM2701
- Company name ON Semiconductor.
- Characteristics IfVf[Temp],IcVce[If],IcIf[Vce],hFEIf[Vce],IcTemp[If],Switching Time,SwitchingTime2,SwitchingTime3

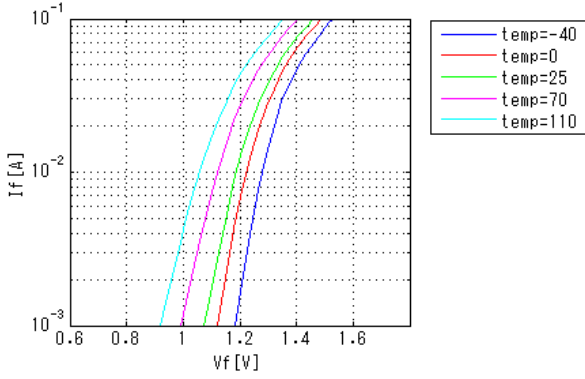
Simulation Range

This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Forward current (DC)	0	to	0.05	A
Collector-emitter voltage (DC)	0	to	40	V
Temperature	-40	to	125	deg C

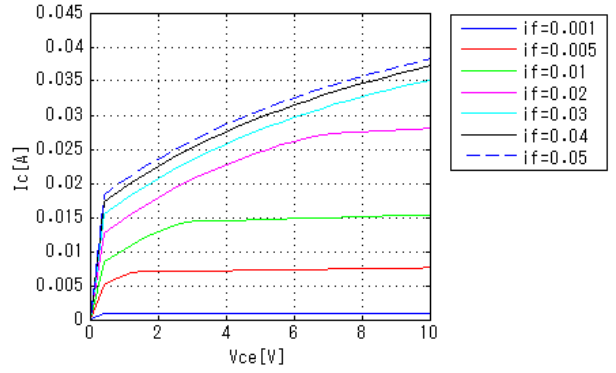
Simulation results are following.
 Explanatory notes — : simulated

IfVf[Temp]



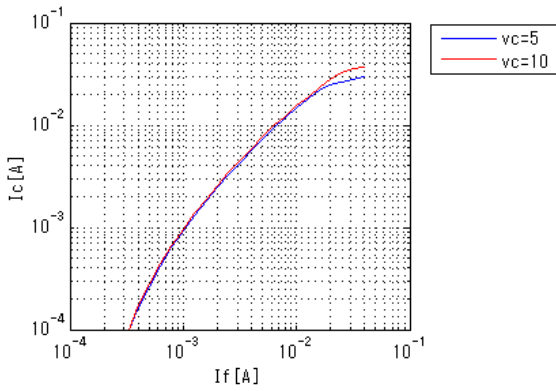
IcVce[If]

Temp. = 25deg C



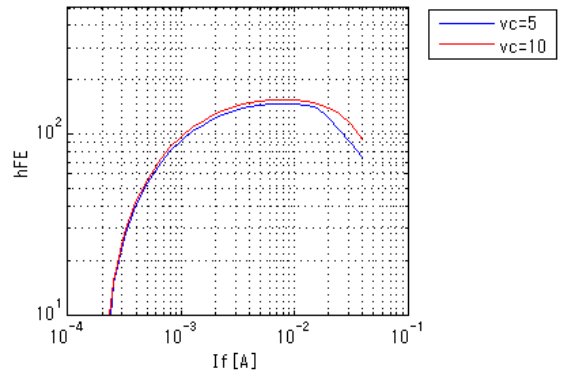
IcIf[Vce]

Temp. = 25deg C



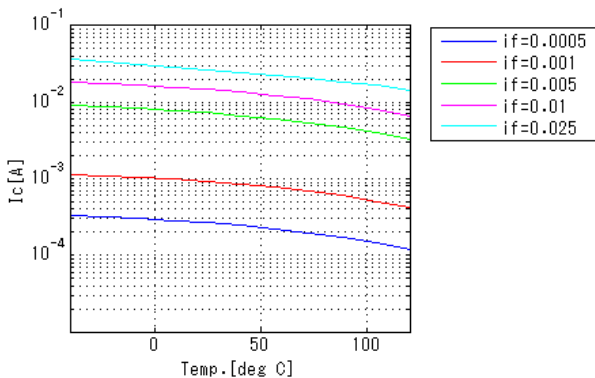
hFEIf[Vce]

Temp. = 25deg C



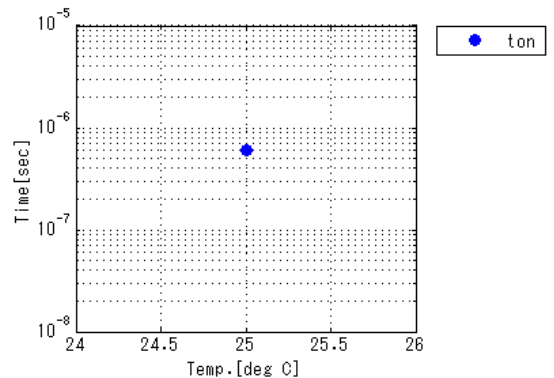
IcTemp[If]

Vc = 5V



SwitchingTime

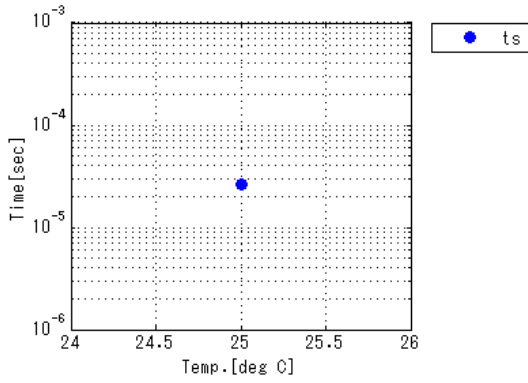
+If = 0.016A, -If = 0A, Vc = 5V, RI = 10000ohm



Simulation results are following.
Explanatory notes — : simulated

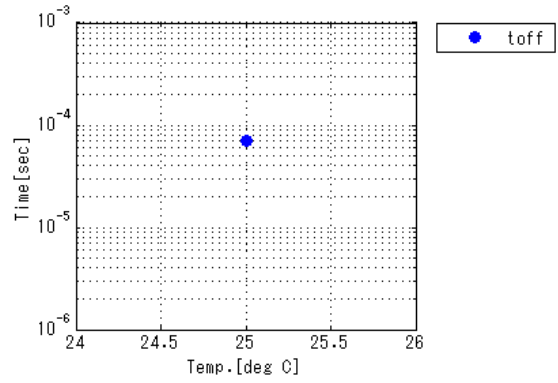
SwitchingTime2

+If = 0.016A, -If = 0A, Vc = 5V, RI = 10000ohm



SwitchingTime3

+If = 0.016A, -If = 0A, Vc = 5V, RI = 10000ohm



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