

PSpice Model

Photocoupler Tr. Output

TOSHIBA

TLP624

Model Information

Model An original macro model
Call Name MDC_TLP624_PS
Pin Assign 1:Anode 2:Cathode 3:Emitter 4:Collector
File List Model Library MDC_TLP624_PS01.lib
 Model Report MDC_TLP624_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 2017-05-16
- Product name TLP624
- Company name Toshiba Corporation
- Characteristics IfVf[Temp],hFEIf[Vce],IcVce[If],IcIf[Vce],IcTemp[If],Switching Time,SwitchingTime2,SwitchingTime3

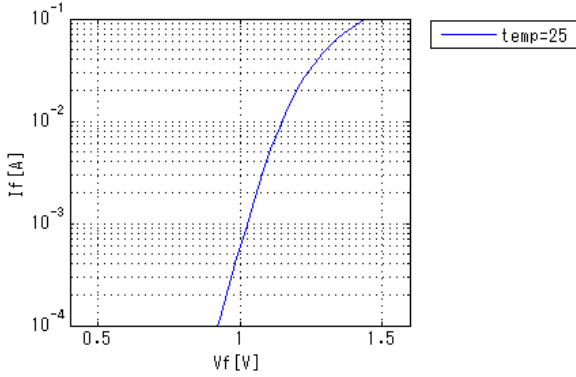
Simulation Range

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	0.06	A
Collector-emitter voltage (DC)	0	to	55	V
Temperature	-55	to	125	deg C

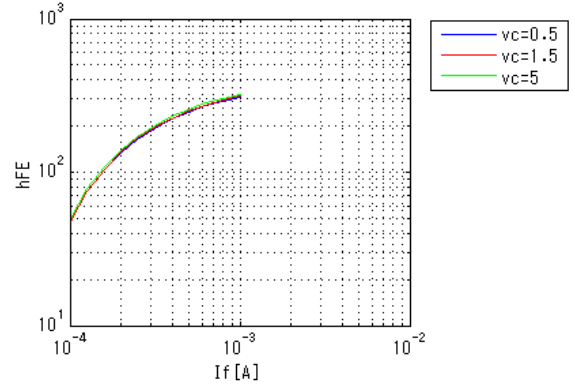
Simulation results are following.
 Explanatory notes — : simulated

IfVf[Temp]



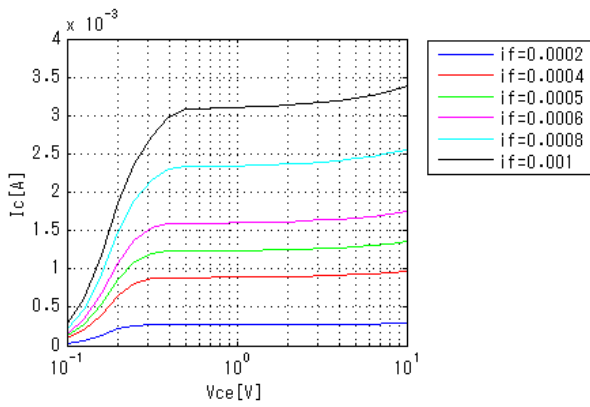
hFEIf[Vce]

Temp. = 25deg C



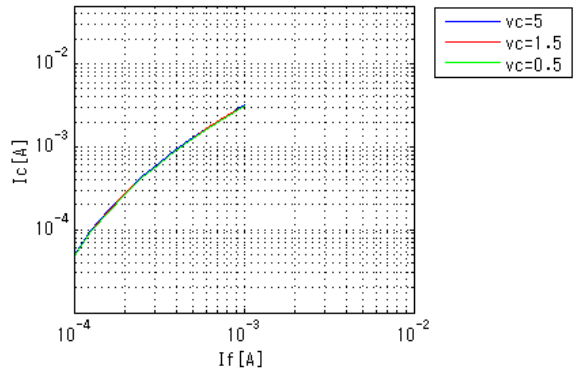
IcVce[If]

Temp. = 25deg C



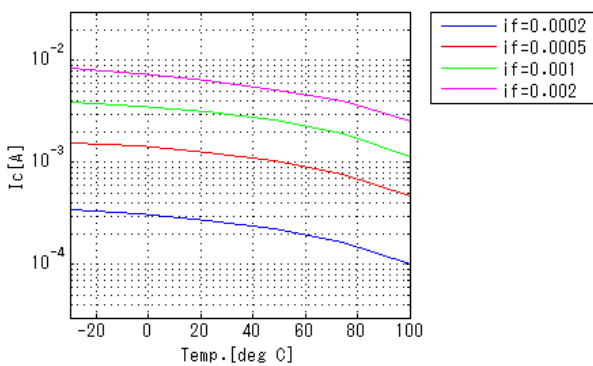
IcIf[Vce]

Temp. = 25deg C



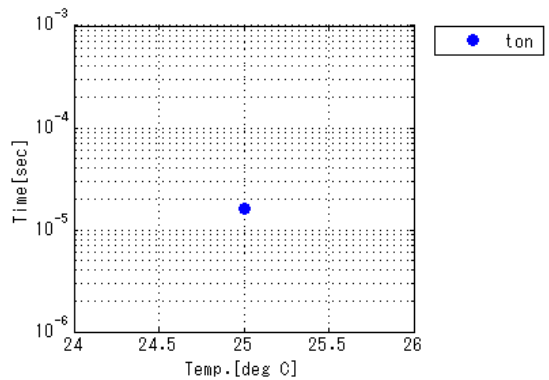
IcTemp[If]

Vc = 0.5V



SwitchingTime

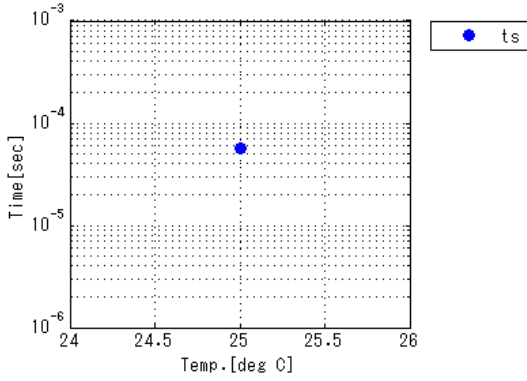
+If = 0.0016A, -If = 0A, Vc = 5V, RI = 4700ohm



Simulation results are following.
Explanatory notes — : simulated

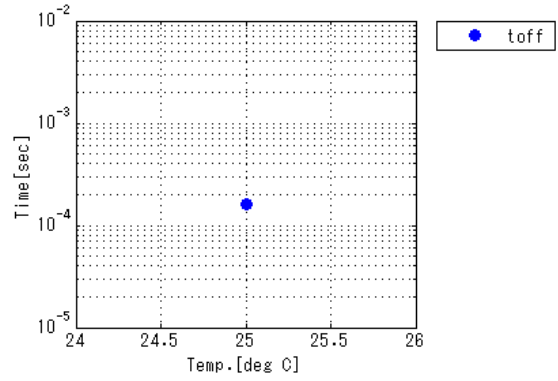
SwitchingTime2

+If = 0.0016A, -If = 0A, Vc = 5V, RI = 4700ohm



SwitchingTime3

+If = 0.0016A, -If = 0A, Vc = 5V, RI = 4700ohm



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