

# PSpice Model Photocoupler IC Output TOSHIBA TLP2768

## Model Information

**Model** An original macro model  
**Call Name** MDC\_TLP2768\_PS  
**Pin Assign** 1:Anode 3:Cathode 4:GND 5:VO 6:VCC  
**File List** Model Library MDC\_TLP2768\_PS01.lib  
 Model Report MDC\_TLP2768\_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 Rev.8.0
- Product name TLP2768
- Company name Toshiba Corporation
- Characteristics IfVf[Temp],IccTemp,IfhITemp[Vcc],SwitchingTemp,Switching If

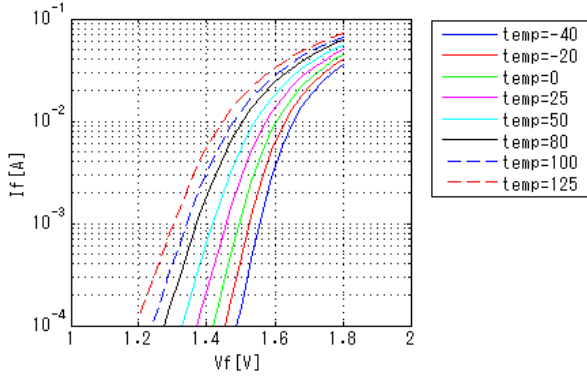
## Simulation Range

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	150	deg C

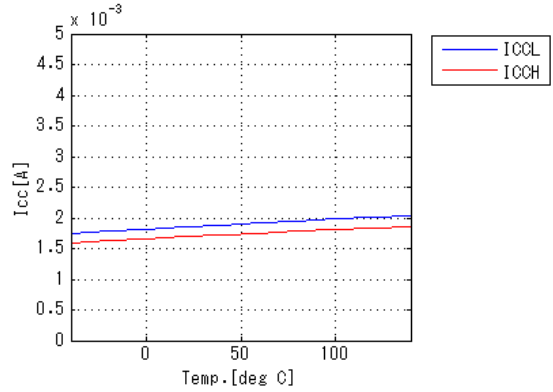
Simulation results are following.  
 Explanatory notes — : simulated

**IfVf[Temp]**



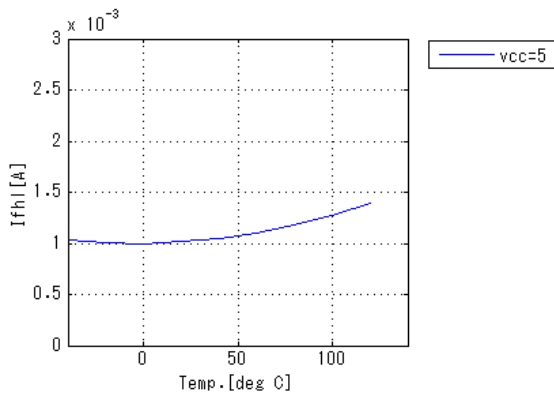
**IccTemp**

Vcc = 5V, Icllif = 0.01A, Icchif = 0A



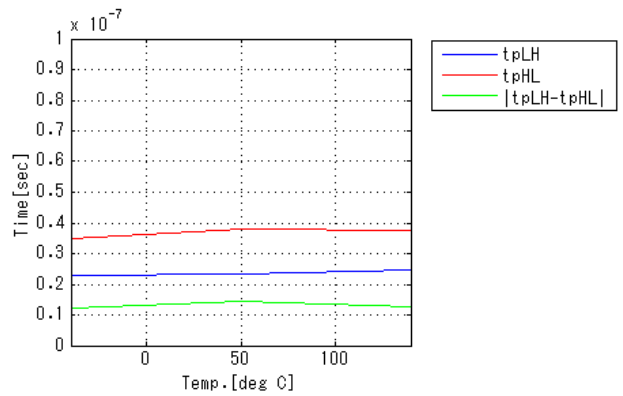
**IfhTemp[Vcc]**

Io = 0.013A



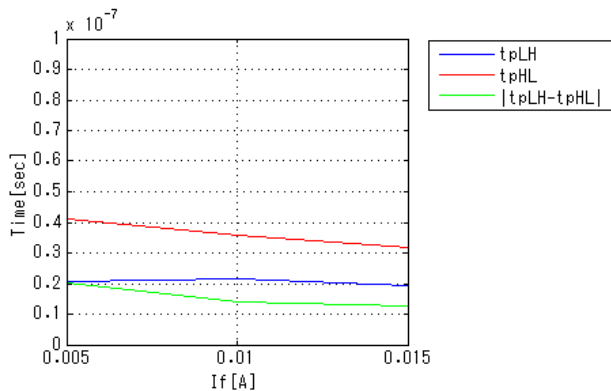
**SwitchingTemp**

Freq. = 5000000Hz, Duty = 50%, If = 0.0075A, Vcc = 5V



**SwitchingIf**

Freq. = 5000000Hz, Duty = 50%, Vcc = 5V



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