

# PSpice Model

## Photocoupler Tr. Output

### VISHAY

### TCLT1005

#### Model Information

**Model** An original macro model  
**Call Name** MDC\_TCLT1005\_PS  
**Pin Assign** 1:Anode 2:Cathode 3:Emitter 4:Collector  
**File List** Model Library MDC\_TCLT1005\_PS01.lib  
 Model Report MDC\_TCLT1005\_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 2.9
- Product name TCLT1005
- Company name Vishay Intertechnology, Inc.
- Characteristics  $I_{fVf}[Temp], I_{cVce}[I_f], I_{clf}[Vce], hFEI_{fVce}$

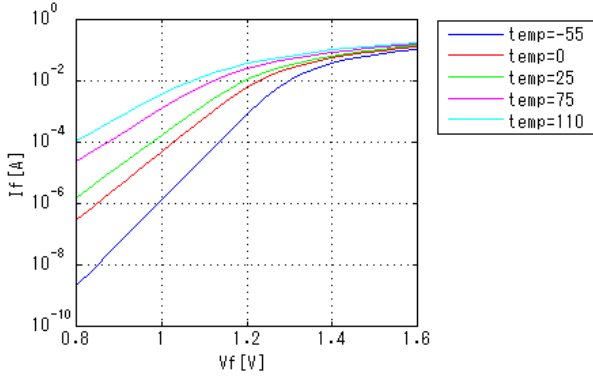
#### Simulation Range

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	70	V
Temperature	-55	to	125	deg C

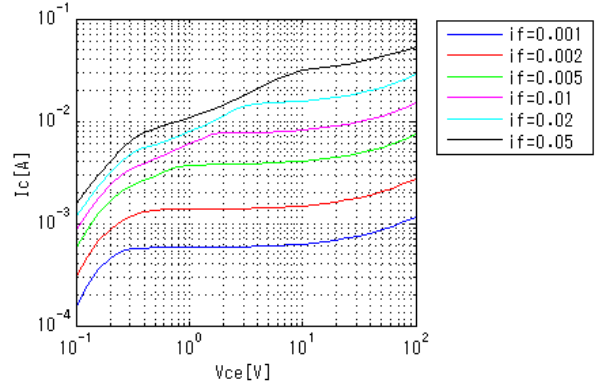
Simulation results are following.  
 Explanatory notes — : simulated

**IfVf[Temp]**



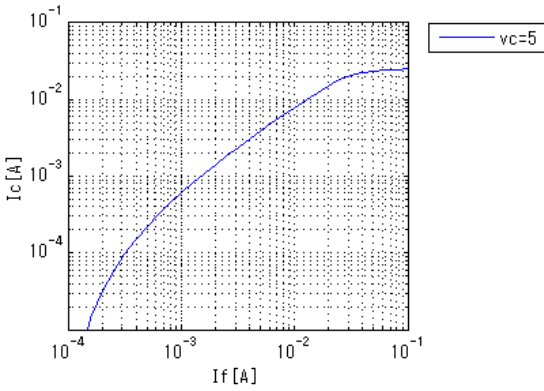
**IcVce[If]**

Temp. = 25deg C



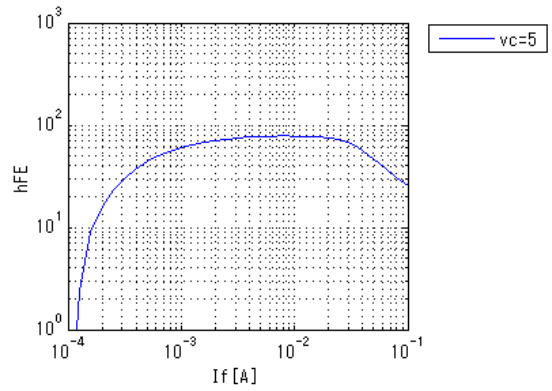
**IcIf[Vce]**

Temp. = 25deg C



**hFEIf[Vce]**

Temp. = 25deg C



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