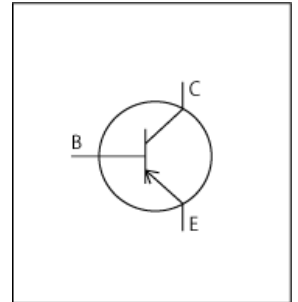


PSpice Model

PNP

TOSHIBA

TMBT3906



Model Information

Model Gummel-Poon
Call Name MDC_TMBT3906_PS
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_TMBT3906_PS01.lib
 Model Report MDC_TMBT3906_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 Unknown
- Product name TMBT3906
- Company name Toshiba Corporation
- Characteristics $I_c V_{ce}[I_b], I_b V_{be}[Temp], hFE I_c[Temp], V_{be}(sat) I_c[Temp], V_{ce}(sat) I_c[Temp]$

Simulation Range

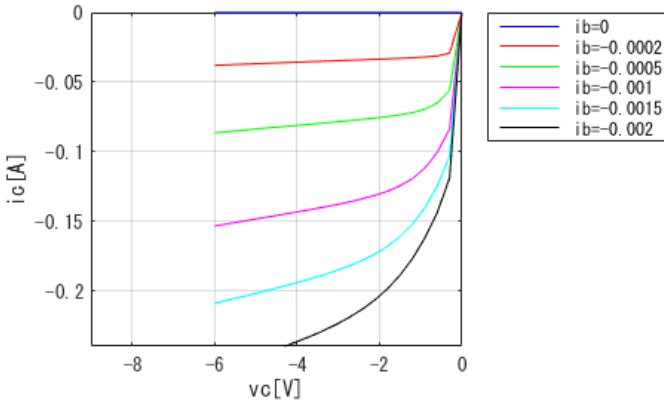
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	-50	V
Base current (DC)	0	to	-30m	A
Temperature	-55	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

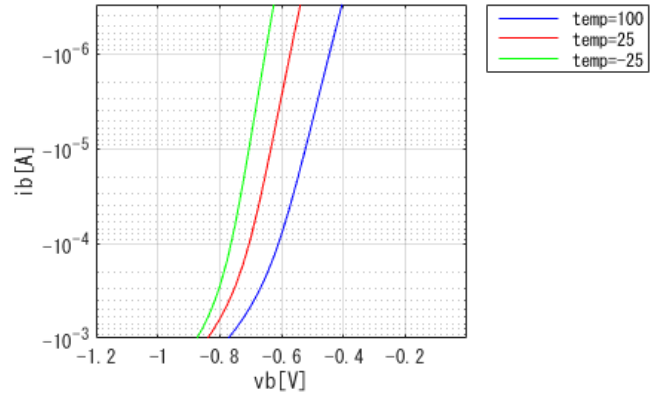
IcVce[ib]

Temp. = 25deg C



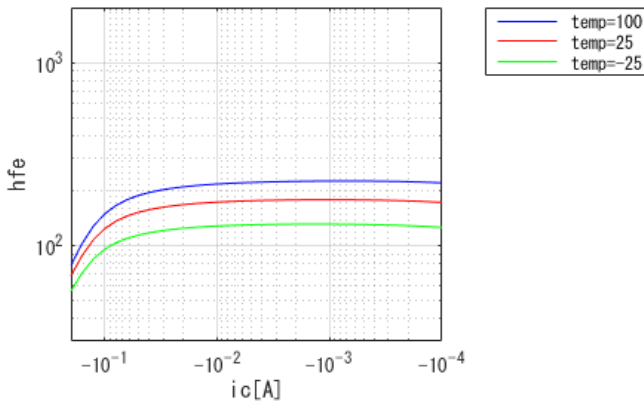
IbVbe[Temp]

Vce = -6V



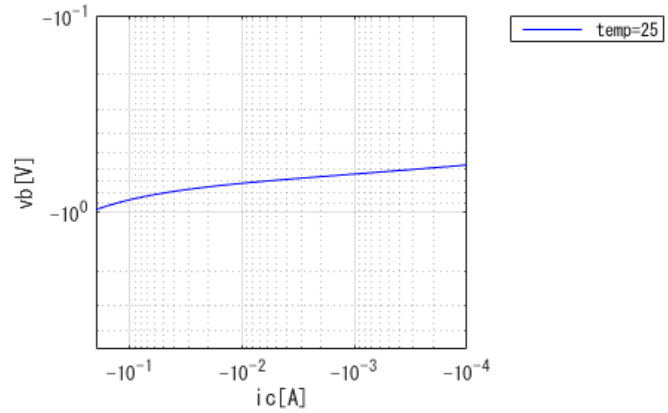
hFEIc[Temp]

Vce = -1V



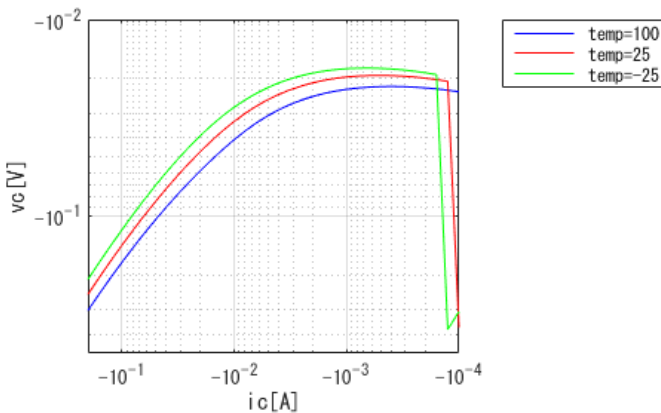
Vbe(sat)Ic[Temp]

IC/IB = 10



Vce(sat)Ic[Temp]

IC/IB = 10



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