

PSpice Model

PNP+PNP

SanKen

STA408A

Model Information

Model Gummel-Poon model
Call Name MDC_STA408A_PS
Pin Assign 1:E 2:B 3:C 4:B 5:C 6:B 7:C 8:B 9:C 10:E
File List Model Library MDC_STA408A_PS00.lib
 Model Report MDC_STA408A_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 None
- Product name STA408A
- Company name Sanken Electric Co., Ltd.
- Characteristics $I_c V_{ce}[I_b], h_{FE} I_c [Temp], V_{ce}(sat) I_c [Temp], V_{ce}(sat) I_b [I_c], I_c V_{be} [Temp]$

Simulation Range

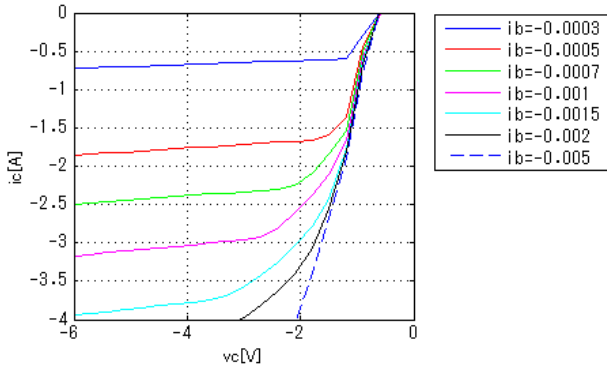
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	-120	V
Base current (DC)	0	to	-1	A
Temperature	-40	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

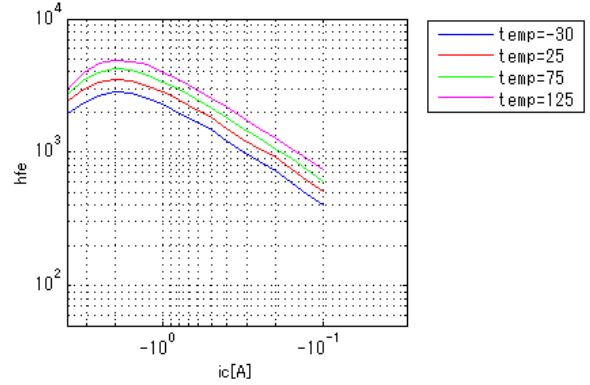
IcVce[ib]

Temp. = 25deg C



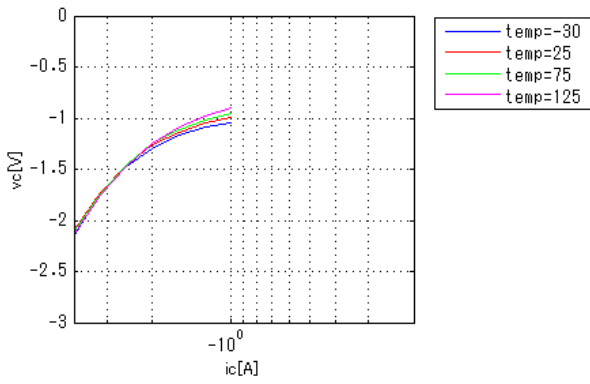
hFEIc[Temp]

Vce = -4V

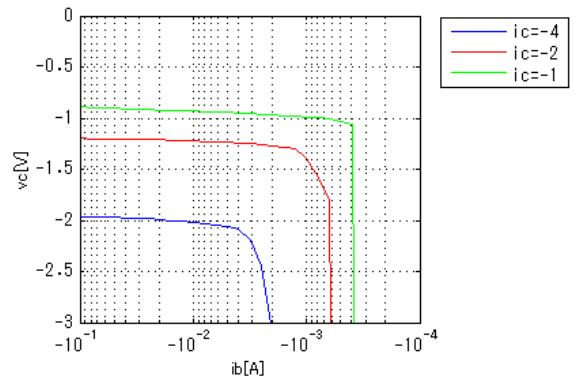


Vce(sat)Ic[Temp]

IC/IB = 1000

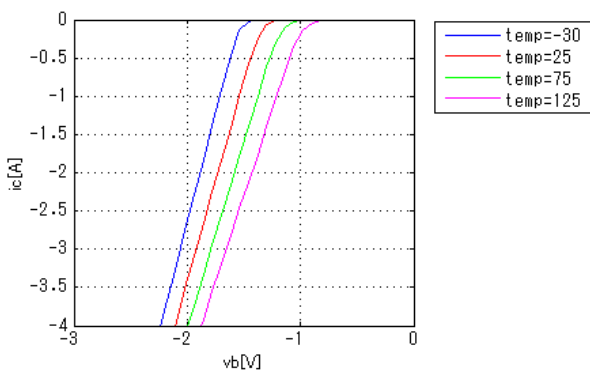


Vce(sat)Ib[Ic]



IcVbe[Temp]

Vce = -4V



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