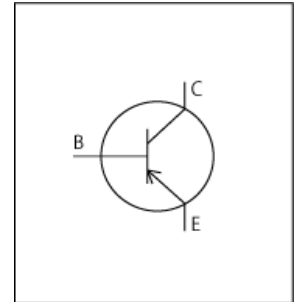


PSpice Model

PNP

ON

NSV30100LT1G



Model Information

Model Gummel-Poon model
Call Name MDC_NSV30100LT1G_PS
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_NSV30100LT1G_PS02.lib
 Model Report MDC_NSV30100LT1G_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.4
- Product name NSV30100LT1G
- Company name ON Semiconductor.
- Characteristics $hFE_{Ic}[V_{ce}], hFE_{Ic}[Temp], V_{ce(sat)}I_c[Temp], V_{be(sat)}I_c[Temp], I_cV_{be}[Temp], V_{be(sat)}I_c[hFE], V_{ce(sat)}I_b[I_c], V_{ce(sat)}I_c[hFE]$

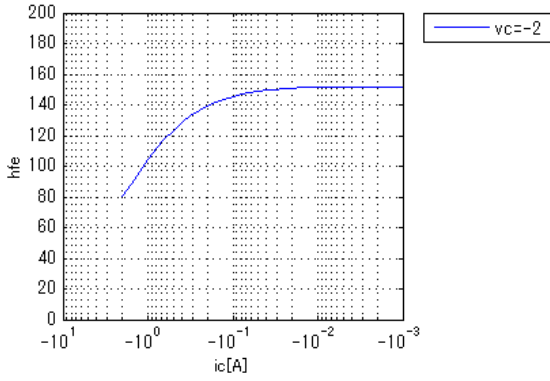
Simulation Range

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	-30	V
Base current (DC)	0	to	-0.10	A
Temperature	-55	to	150	deg C

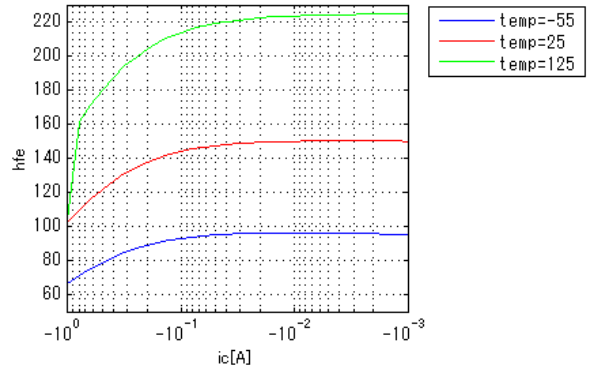
Simulation results are following.
 Explanatory notes — : simulated

hFEIc[Vce]



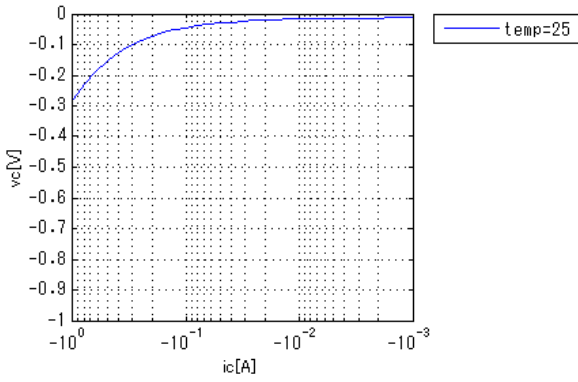
hFEIc[Temp]

Vce = -1V



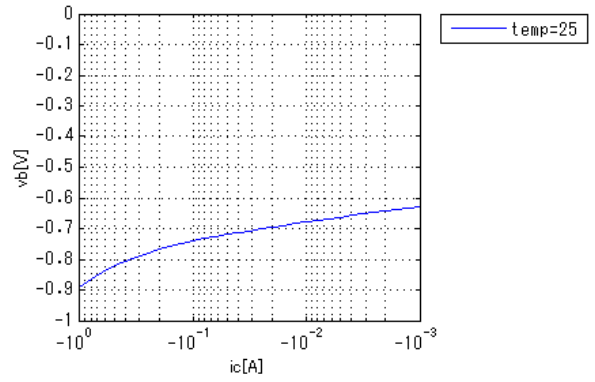
Vce(sat)Ic[Temp]

IC/IB = 10



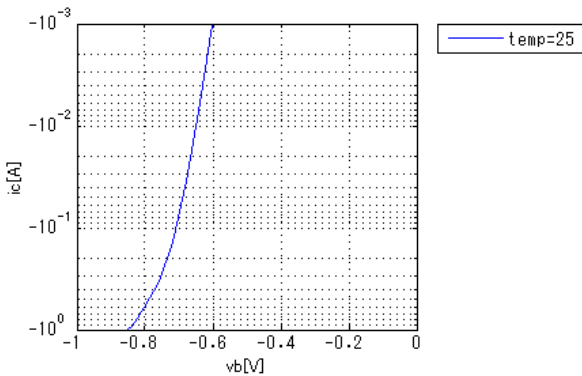
Vbe(sat)Ic[Temp]

IC/IB = 10

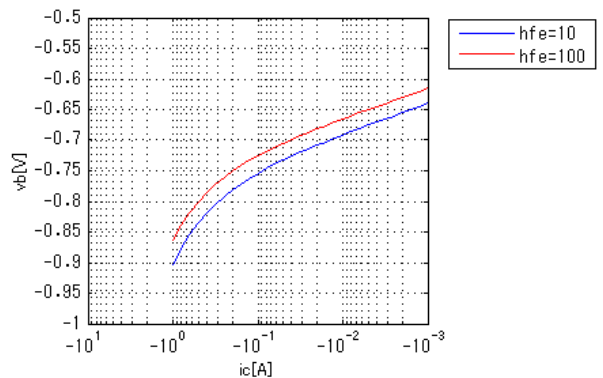


IcVbe[Temp]

Vce = -2V

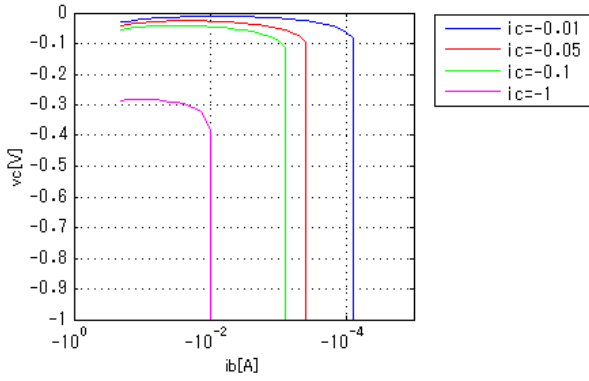


Vbe(sat)Ic[hFE]

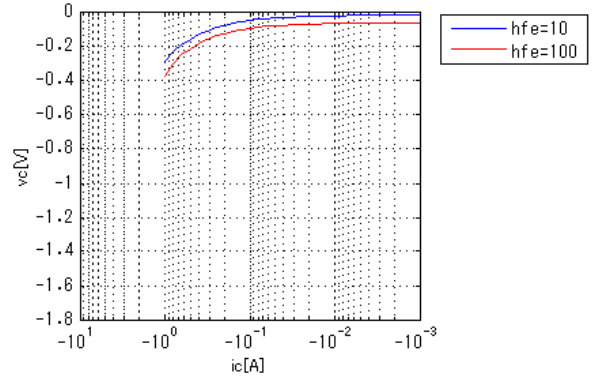


Simulation results are following.
 Explanatory notes — : simulated

Vce(sat)Ib[Ic]



Vce(sat)Ic[hFE]



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