

PSpice Model

PNP

ON

NSS12100XV6T1G



Model Information

Model Gummel-Poon model
Call Name MDC_NSS12100XV6T1G_PS
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_NSS12100XV6T1G_PS02.lib
 Model Report MDC_NSS12100XV6T1G_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.0
- Product name NSS12100XV6T1G
- Company name ON Semiconductor.
- Characteristics $V_{ce(sat)}|I_c[Temp]$, $h_{FE}I_c[Temp]$, $V_{be(sat)}|I_c[Temp]$, $V_{ce(sat)}|I_b[I_c]$, C_{ib} , C_{ob}

Simulation Range

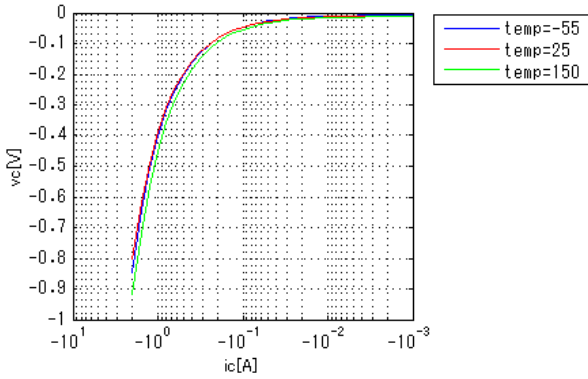
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	-12	V
Base current (DC)	0	to	-0.10	A
Temperature	-55	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

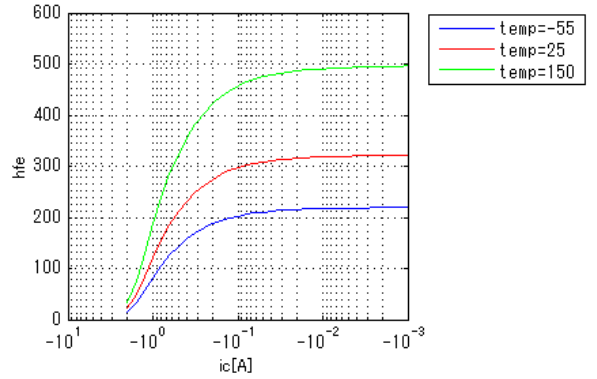
Vce(sat)Ic[Temp]

IC/IB = 10



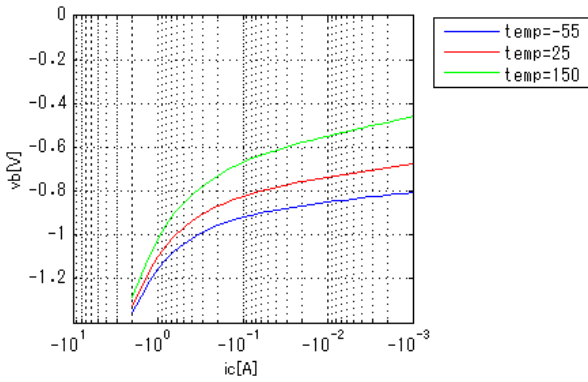
hFEIc[Temp]

Vce = -2V

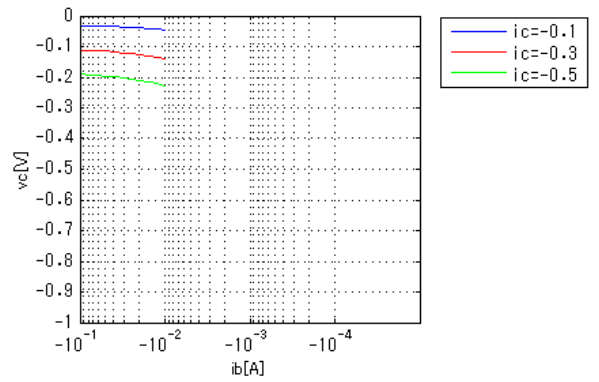


Vbe(sat)Ic[Temp]

IC/IB = 10

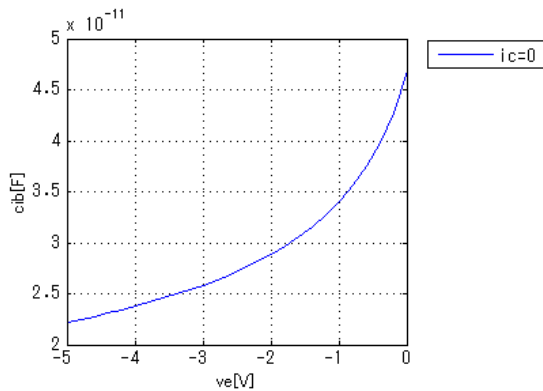


Vce(sat)Ib[Ic]



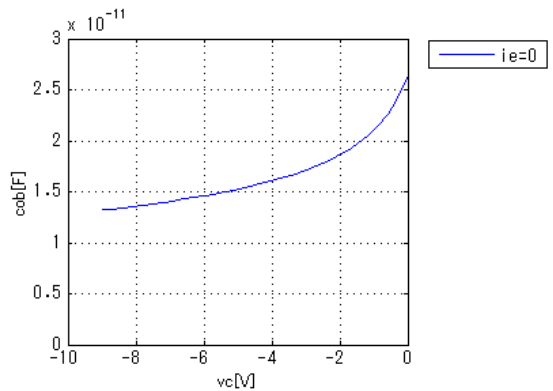
Cib

Freq. = 1MHz



Cob

Freq. = 1MHz



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MoDeCH Inc.

Head Office

Location: Mitsuseimei Hachioji Bldg., 5-15 Yokoyama-cho, Hachioji-Shi, Tokyo 192-0081, Japan

Tel:+81-42-656-3360

E-Mail:model-on-support@modech.co.jp

URL:<http://www.modech.com/en/>