

PSpice Model

PNP

ROHM

2SB1189



Model Information

Model Gummel-Poon
Call Name MDC_2SB1189_PS
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_2SB1189_PS01.lib
 Model Report MDC_2SB1189_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 2010.07 - Rev.B
- Product name 2SB1189
- Company name ROHM Co., Ltd.
- Characteristics $I_c[V_{ce}[ib], I_c[V_{be}[Temp], hFE I_c[V_{ce}], V_{ce}(sat) I_c[hFE], fT I_c[V_{ce}], C_{ob}, C_{ib}$

Simulation Range

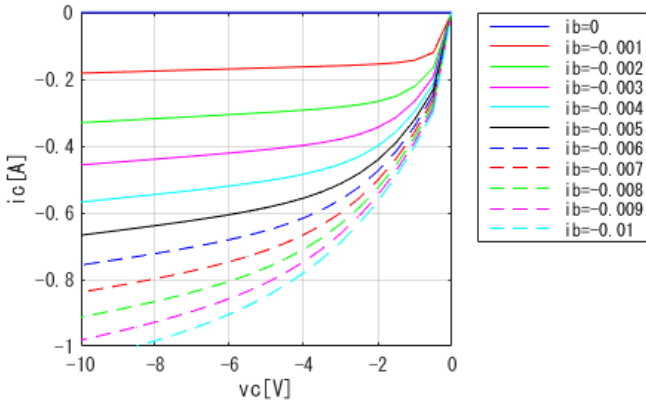
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	-80	V
Temperature	-55	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

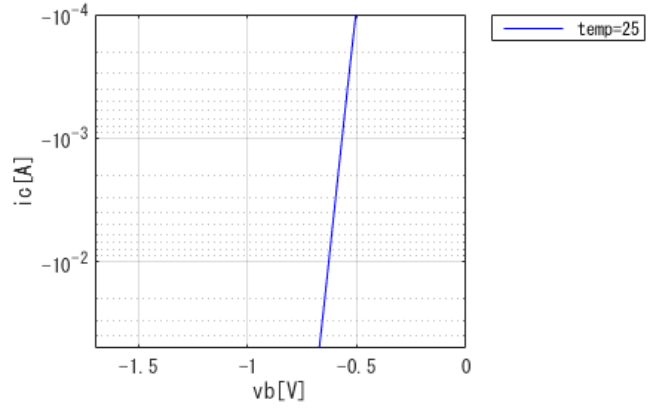
IcVce[ib]

Temp. = 25deg C

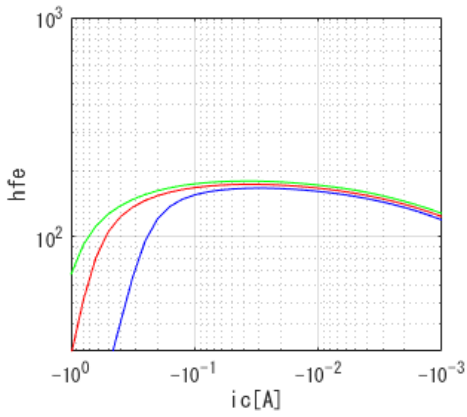


IcVbe[Temp]

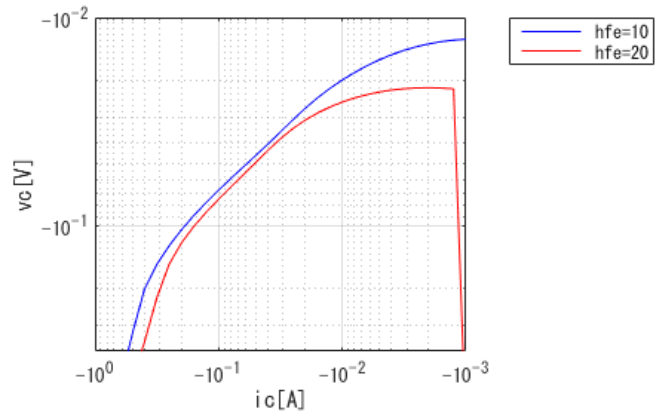
Vce = -6V



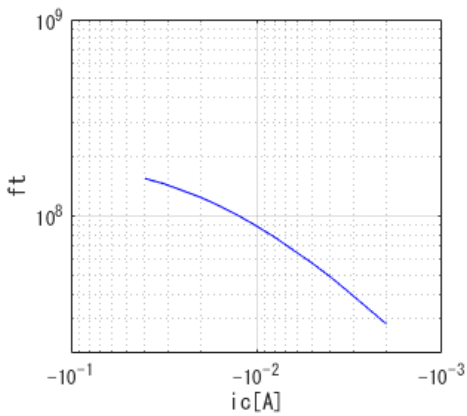
hFEIc[Vce]



Vce(sat)Ic[hFE]

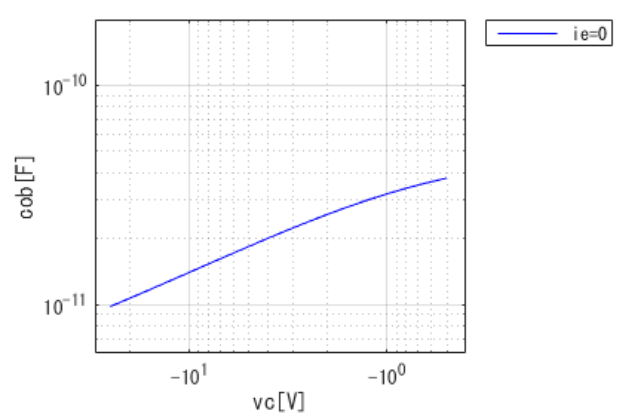


fTlIc[Vce]



Cob

Freq. = 1MHz

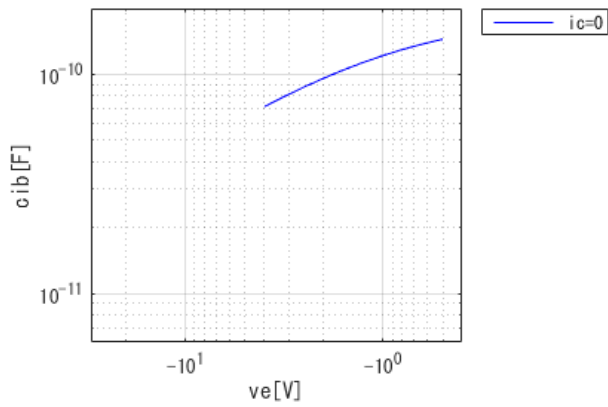


Simulation results are following.

Explanatory notes — : simulated

Cib

Freq. = 1MHz



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