

LTspice Model

PNP

ROHM

2SB1132T100Q



Model Information

Model Gummel-Poon model
Call Name MDC_2SB1132T100Q_LT
Pin Assign 1:E 2:C 3:B
File List Model Library MDC_2SB1132T100Q_LT01.lib
 Model Report MDC_2SB1132T100Q_LT.pdf (this file)

Verified Simulator Version LTspice version XVII
Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 2009.12 - Rev.C
- Product name 2SB1132T100Q
- Company name ROHM Co., Ltd.
- Characteristics $I_c V_{ce}[I_b], I_c V_{be}[Temp], hFE I_c[V_{ce}], hFE I_c[Temp], V_{ce}(sat) I_c[Temp], V_{ce}(sat) I_b[I_c], f T I_c[V_{ce}], C_{ob}$

Simulation Range

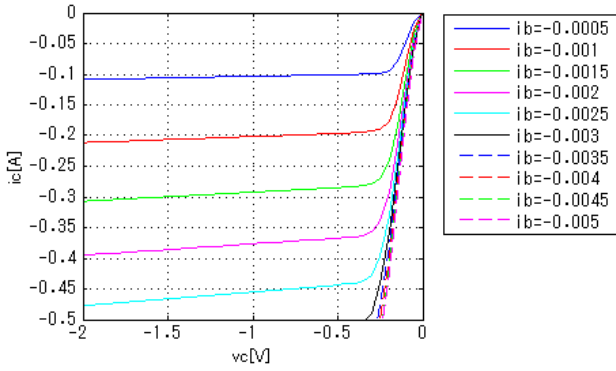
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	-40	V
Base current (DC)	0	to	-0.05	A
Temperature	-50	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

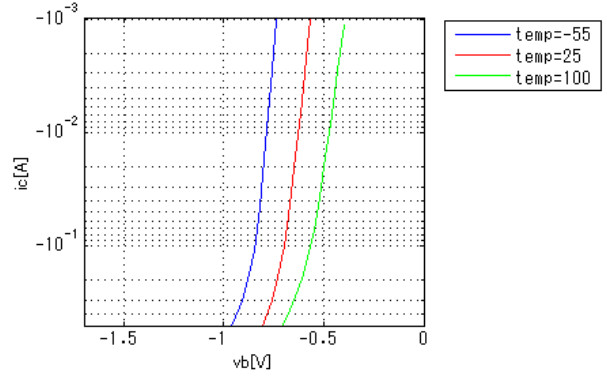
IcVce[ib]

Temp. = 25deg C

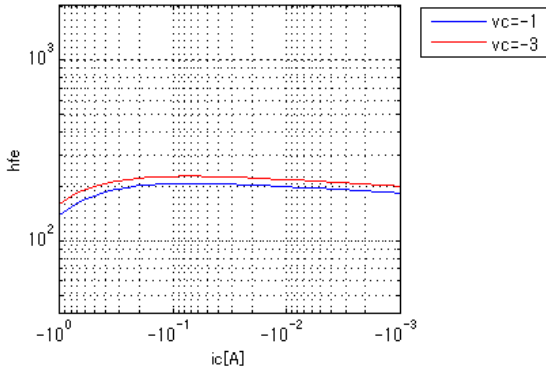


IcVbe[Temp]

Vce = -6V

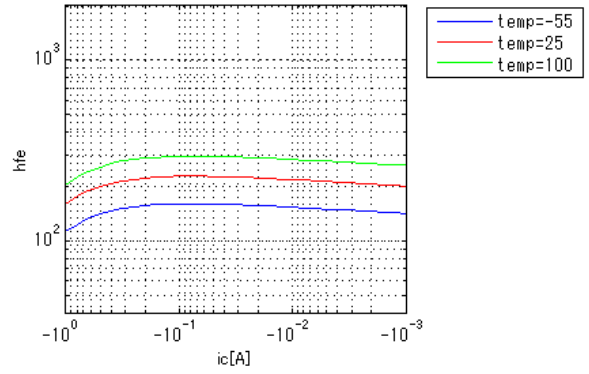


hFEIc[Vce]



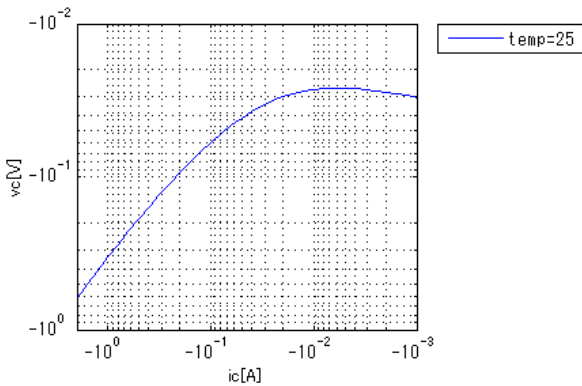
hFEIc[Temp]

Vce = -3V

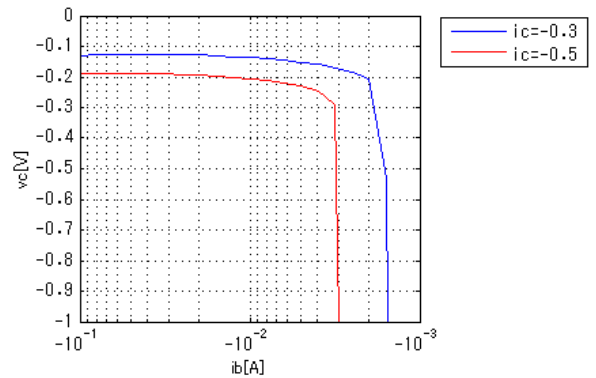


Vce(sat)Ic[Temp]

IC/IB = 10

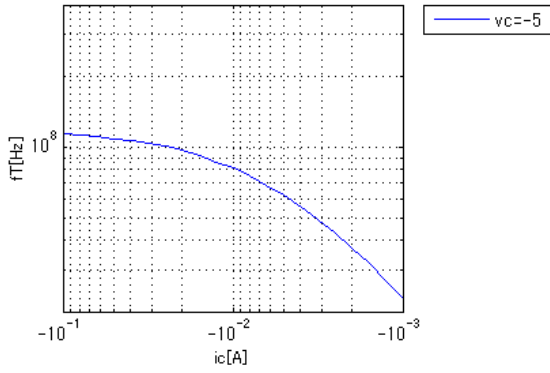


Vce(sat)Ib[Ic]



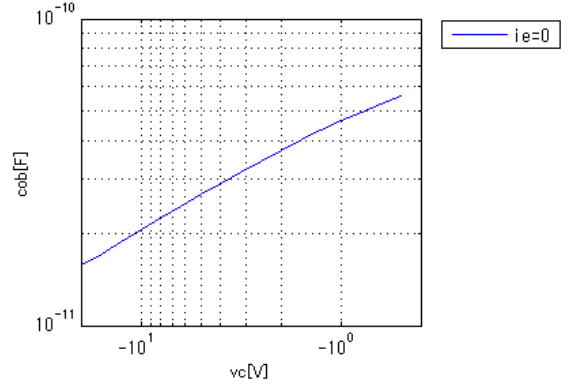
Simulation results are following.
 Explanatory notes — : simulated

fT_{ic}[Vce]



Cob

Freq. = 1MHz



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