

LTspice Model

PNP

RENESAS

2SB605



Model Information

Model Mextram model
Call Name MDC_2SB605_LT
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_2SB605_LT01.lib
 Model Report MDC_2SB605_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 Unknown
- Product name 2SB605
- Company name Renesas Electronics Corporation
- Characteristics $I_{cV_{ce}[ib]}$, $V_{ce(sat)}I_c[Temp]$, $V_{be(sat)}I_c[Temp]$, $I_cV_{be}[Temp]$, $h_{FE}I_c[Temp]$, $f_T I_c[V_{ce}]$, C_{ob}

Simulation Range

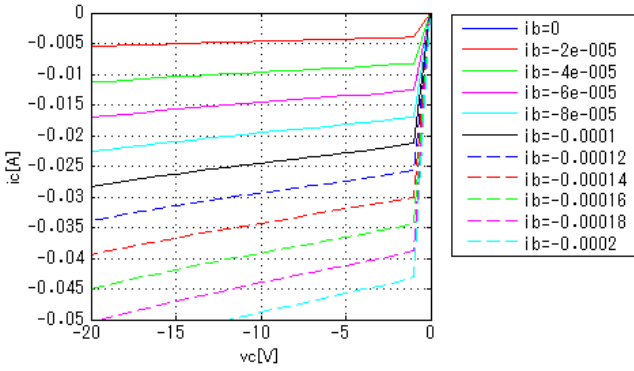
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	-50	V
Base current (DC)	0	to	-0.10	A
Temperature	-55	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

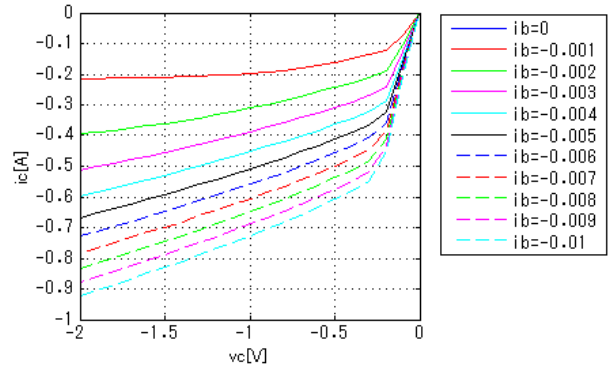
IcVce[ib]

Temp. = 25deg C



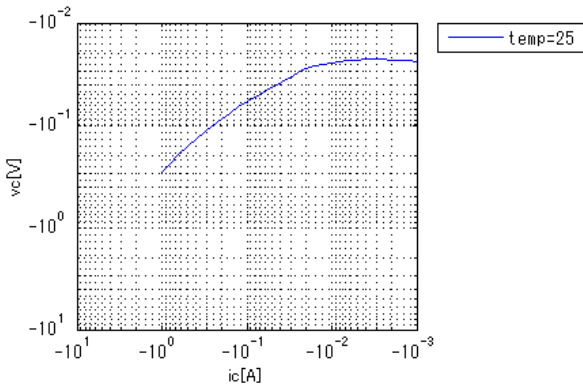
IcVce[ib]

Temp. = 25deg C



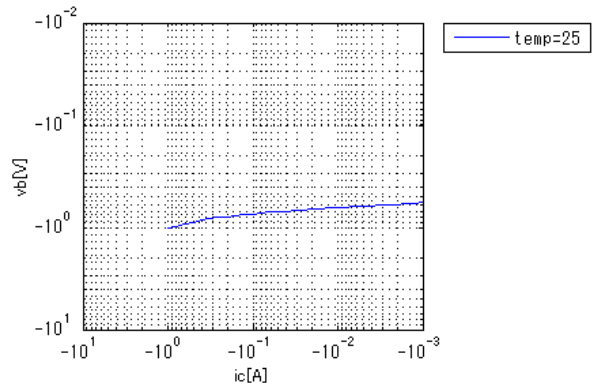
Vce(sat)Ic[Temp]

IC/IB = 10



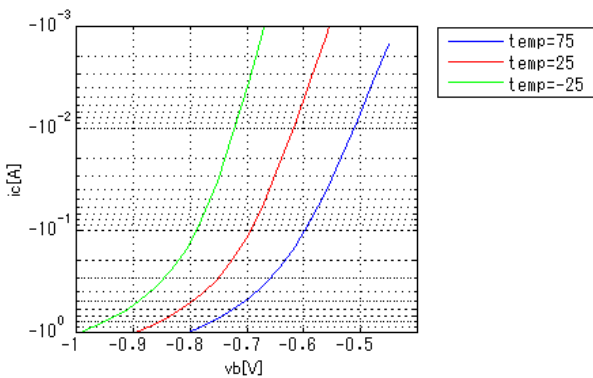
Vbe(sat)Ic[Temp]

IC/IB = 10



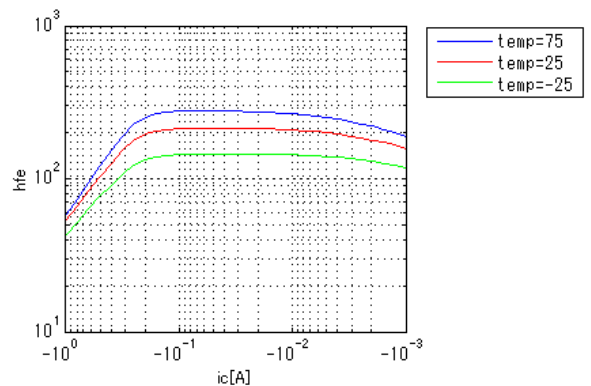
IcVbe[Temp]

Vce = -6V



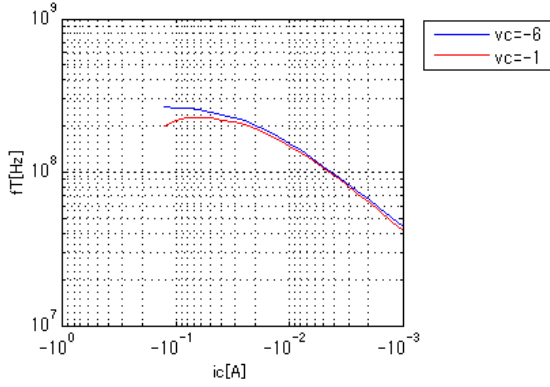
hFEIc[Temp]

Vce = -1V



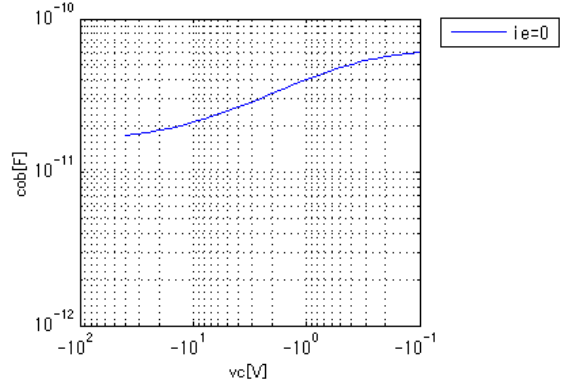
Simulation results are following.
 Explanatory notes — : simulated

fT_{lc}[Vce]



Cob

Freq. = 1MHz



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