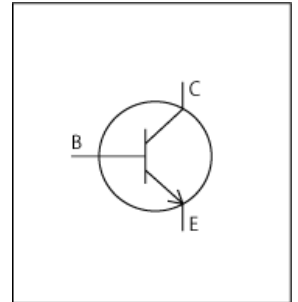


PSpice Model

NPN

RENESAS

2SD571



Model Information

Model Mextram model
Call Name MDC_2SD571_PS
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_2SD571_PS01.lib
 Model Report MDC_2SD571_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 August 1986
- Product name 2SD571
- Company name Renesas Electronics Corporation
- Characteristics $I_c V_{be}[Temp]$, $I_c V_{ce}[I_b]$, $hFE I_c[Temp]$, $V_{be}(sat) I_c[Temp]$, $V_{ce}(sat) I_c[Temp]$, $fT I_c[V_{ce}]$, C_{ob}

Simulation Range

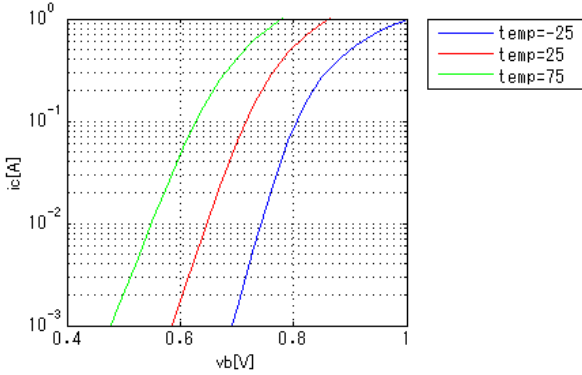
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	50	V
Base current (DC)	0	to	0.07	A
Temperature	-55	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

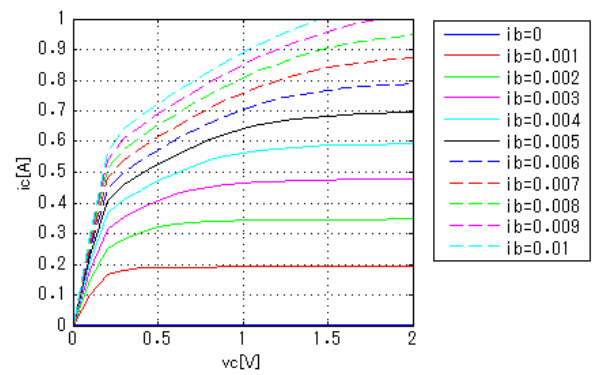
IcVbe[Temp]

Vce = 6V



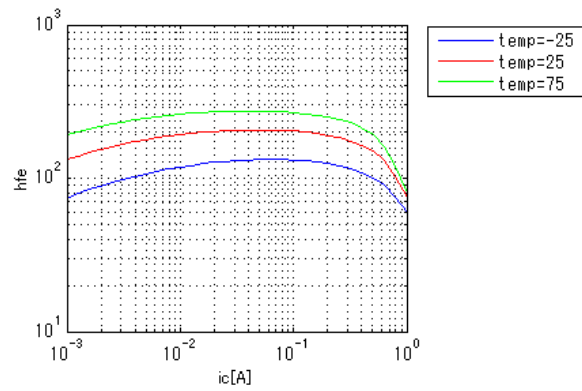
IcVce[ib]

Temp. = 25deg C



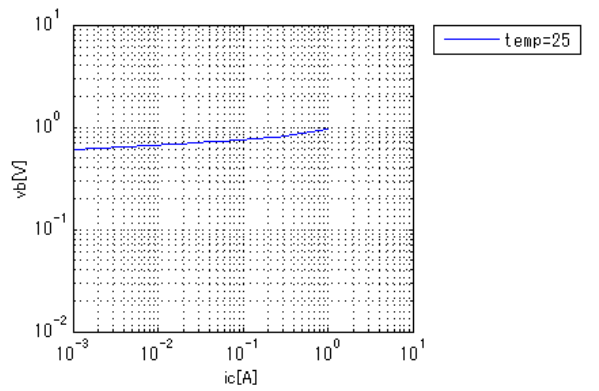
hFEIc[Temp]

Vce = 1V



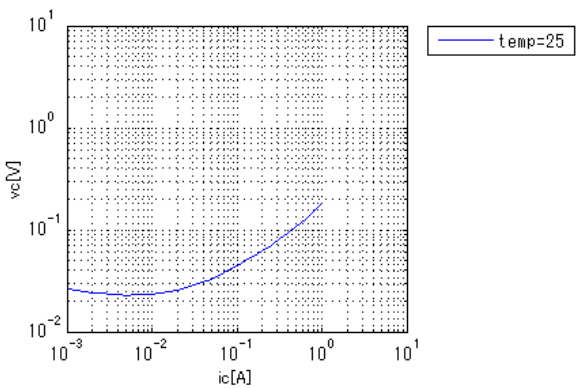
Vbe(sat)Ic[Temp]

IC/IB = 10

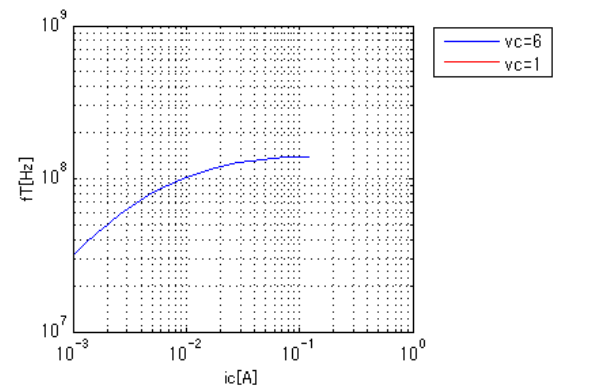


Vce(sat)Ic[Temp]

IC/IB = 10



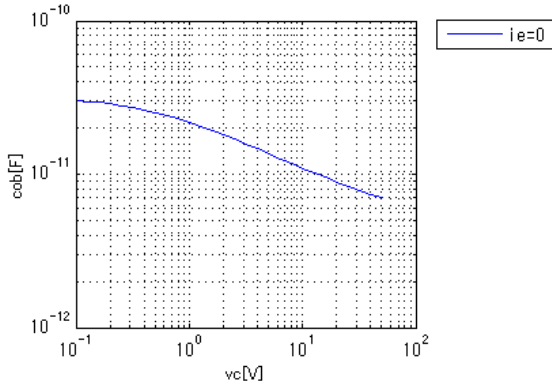
fT Ic [Vce]



Simulation results are following.
 Explanatory notes — : simulated

Cob

Freq. = 1MHz



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