

PSpice Model

PNP

Diodes

2DB1697



Model Information

Model Mextram model
Call Name MDC_2DB1697_PS
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_2DB1697_PS01.lib
 Model Report MDC_2DB1697_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. 3 - 2
- Product name 2DB1697
- Company name Diodes Incorporated
- Characteristics $I_C V_{CE}[I_B], h_{FE} I_C[Temp], V_{CE(sat)} I_C[Temp], I_C V_{BE}[Temp], V_{BE(sat)} I_C[Temp], C_{ib}, C_{ob}, f_T I_C[V_{CE}]$

Simulation Range

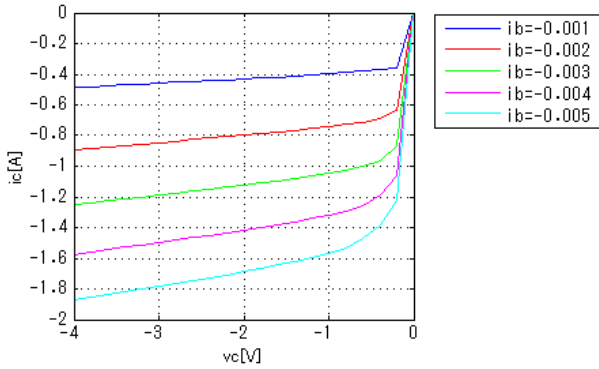
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

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

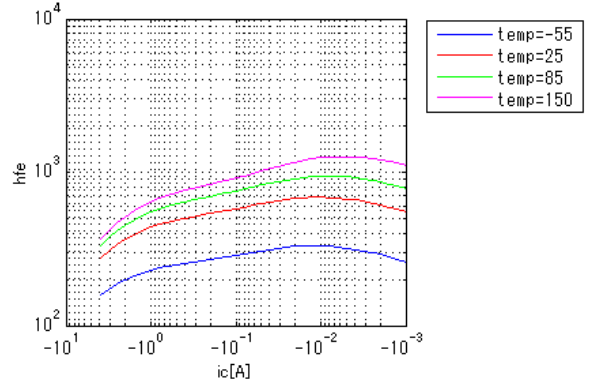
IcVce[ib]

Temp. = 25deg C



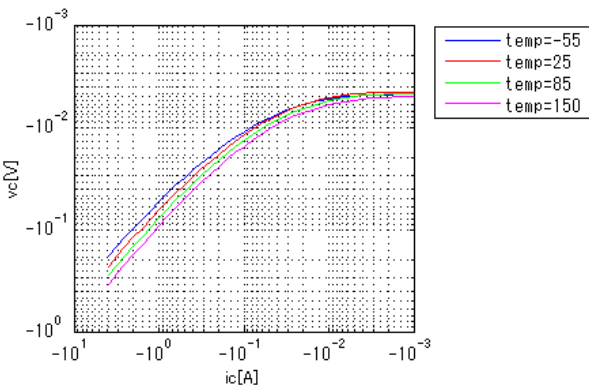
hFEIc[Temp]

Vce = -4V



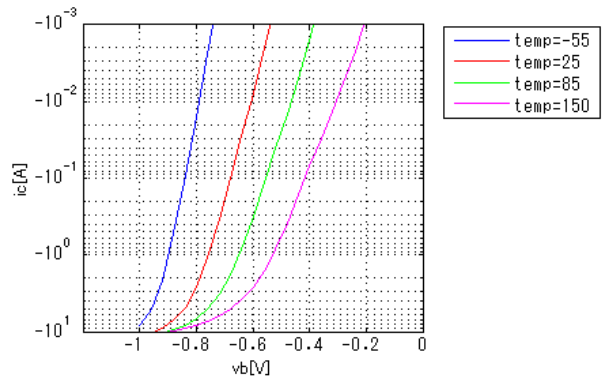
Vce(sat)Ic[Temp]

IC/IB = 20



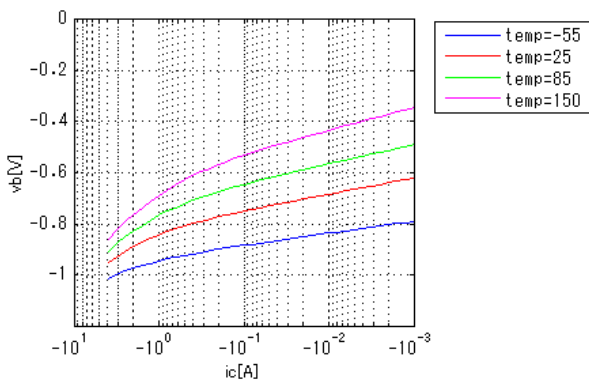
IcVbe[Temp]

Vce = -4V



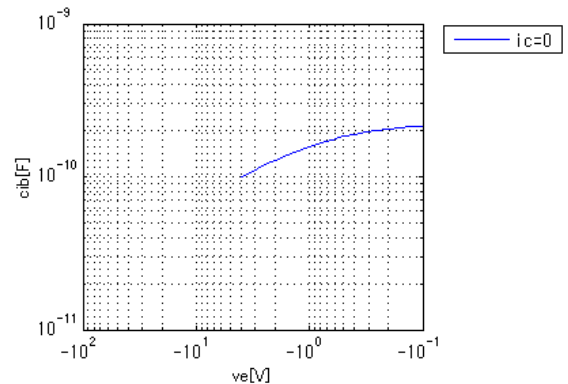
Vbe(sat)Ic[Temp]

IC/IB = 20



Cib

Freq. = 1MHz

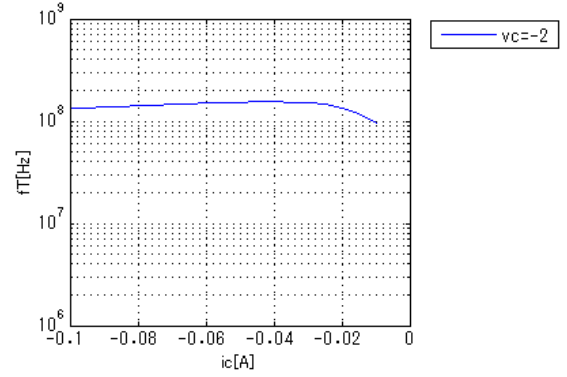
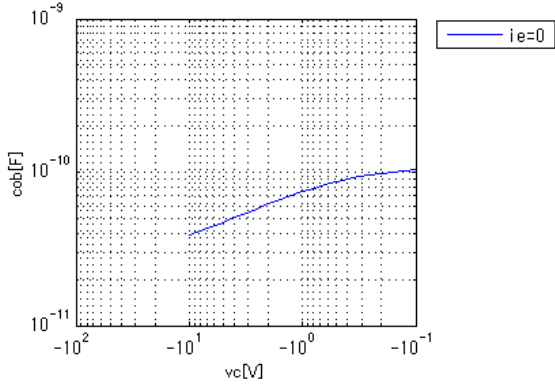


Simulation results are following.
 Explanatory notes — : simulated

Cob

Freq. = 1MHz

fT_{ic}[Vce]



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