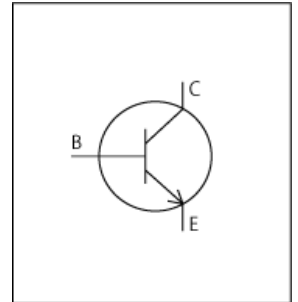


PSpice Model

NPN

ON

FJP13007



Model Information

Model Gummel-Poon model
Call Name MDC_FJP13007_PS
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_FJP13007_PS02.lib
 Model Report MDC_FJP13007_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. 1.1.0
- Product name FJP13007
- Company name ON Semiconductor.
- Characteristics hFEIc[Temp], Vce(sat)Ic[Temp], Vbe(sat)Ic[Temp], Cob

Simulation Range

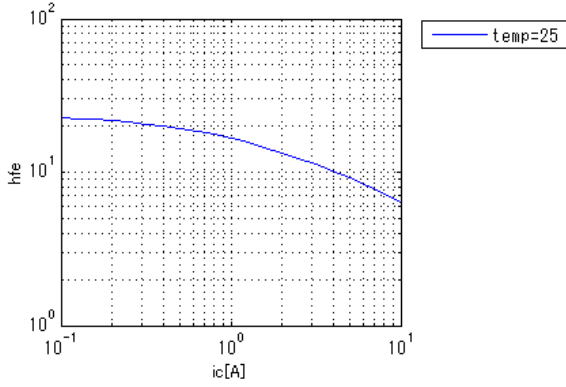
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	400	V
Base current (DC)	0	to	4	A
Temperature	-65	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

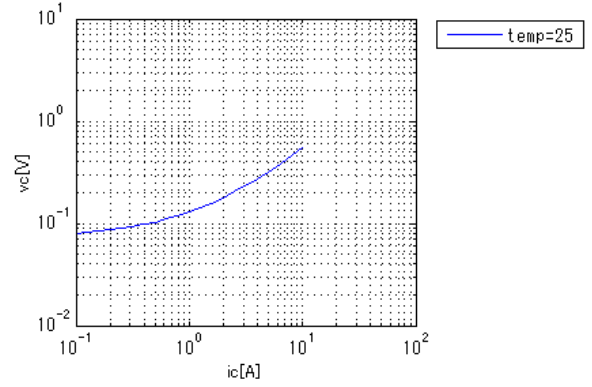
hFEIc[Temp]

Vce = 5V



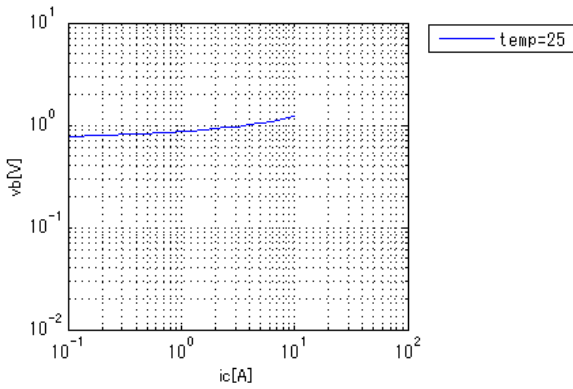
Vce(sat)Ic[Temp]

IC/IB = 3



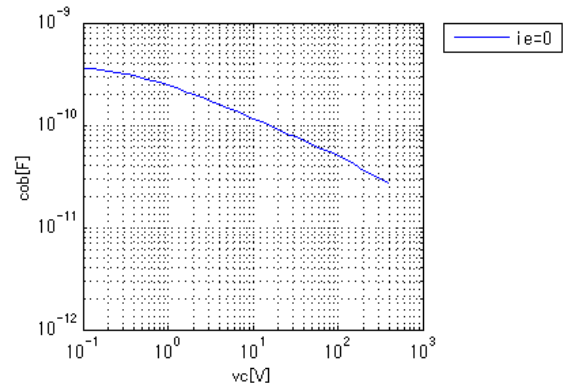
Vbe(sat)Ic[Temp]

IC/IB = 3



Cob

Freq. = 0.1MHz



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