

PSpice Model

NPN

Nexperia B.V.

BC846B



Model Information

Model Gummel-Poon model
Call Name MDC_BC846B_PS
Pin Assign 1:B 2:E 3:C
File List Model Library MDC_BC846B_PS01.lib
 Model Report MDC_BC846B_PS.pdf (this file)

Verified Simulator Version PSpice version 17.2
Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 9
- Product name BC846B
- Company name Nexperia B.V.
- Characteristics $hFEIc[Temp], IcVbe[Temp], Vce(sat)Ic[Temp], Vbe(sat)Ic[Temp]$

Simulation Range

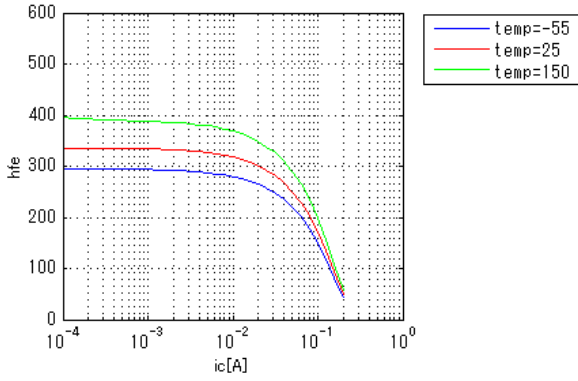
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	65	V
Base current (DC)	0	to	0.2	A
Temperature	-65	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

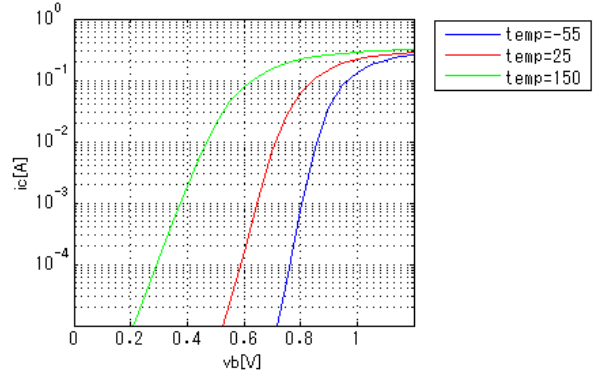
hFEIc[Temp]

Vce = 5V



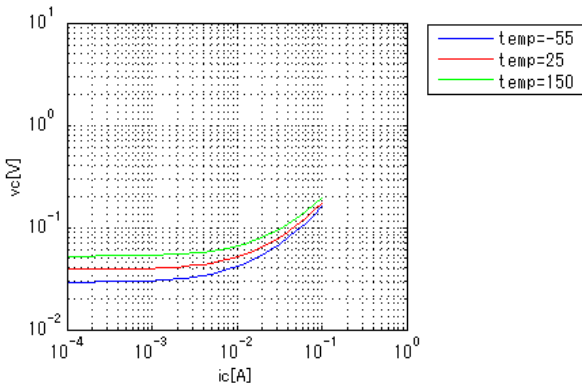
IcVbe[Temp]

Vce = 5V



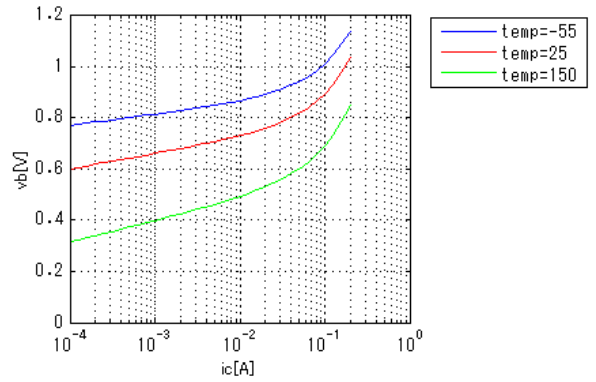
Vce(sat)Ic[Temp]

IC/IB = 20



Vbe(sat)Ic[Temp]

IC/IB = 10



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