

PSpice Model

NPN

RENESAS

2SC4331



Model Information

Model Mextram model
Call Name MDC_2SC4331_PS
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_2SC4331_PS01.lib
 Model Report MDC_2SC4331_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 April 1st, 2010
- Product name 2SC4331
- Company name Renesas Electronics Corporation
- Characteristics $I_{cVce}[ib], hFEI_{c}[Temp], V_{be}(sat)I_{c}[Temp], V_{ce}(sat)I_{c}[Temp]$

Simulation Range

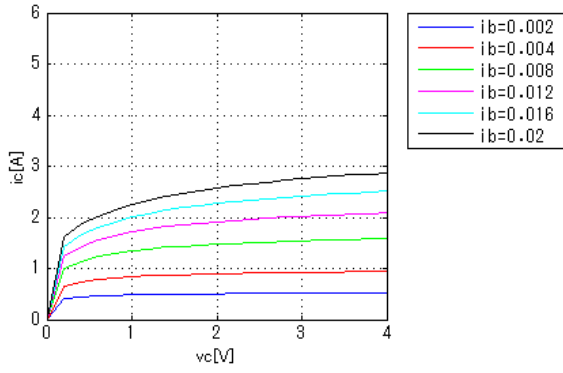
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	100	V
Base current (DC)	0	to	3	A
Temperature	-55	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

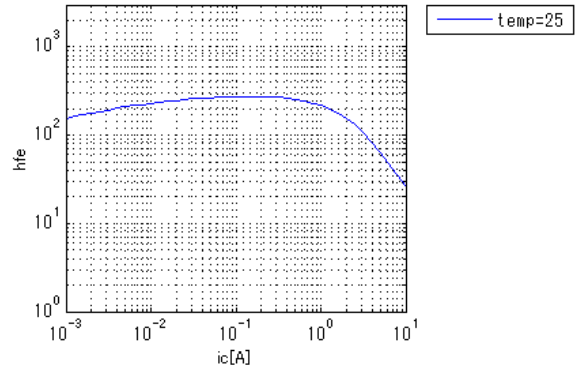
IcVce[ib]

Temp. = 25deg C



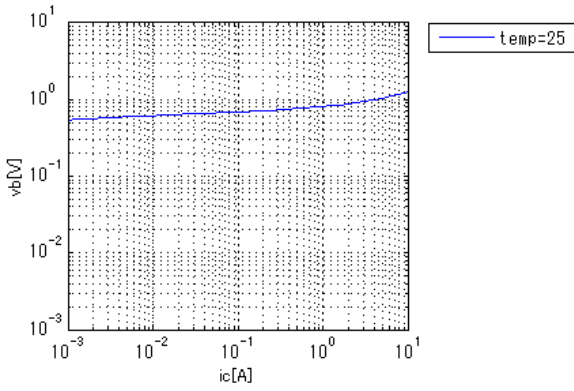
hFEIc[Temp]

Vce = 2V



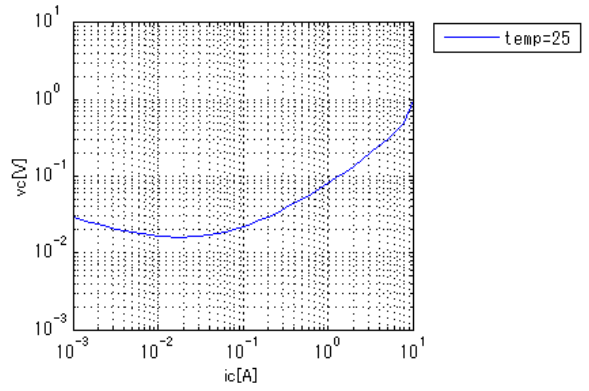
Vbe(sat)Ic[Temp]

IC/IB = 20



Vce(sat)Ic[Temp]

IC/IB = 20



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