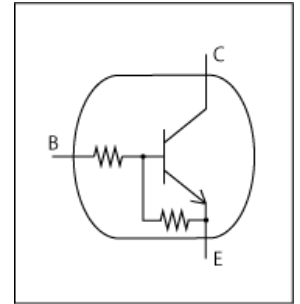


PSpice Model

BRT (Bias Resistor Transistor)

KEC

KRC104



Model Information

Model A macro model based on Gummel-Poon model
Call Name MDC_KRC104_PS
Pin Assign 1:E 2:C 3:B
File List Model Library MDC_KRC104_PS01.lib
 Model Report MDC_KRC104_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 No:2
- Product name KRC104
- Company name KEC Corporation
- Characteristics IcVi[OFF],IcVi[ON],hFEIc[Temp],tr,tstg,tf

Simulation Range

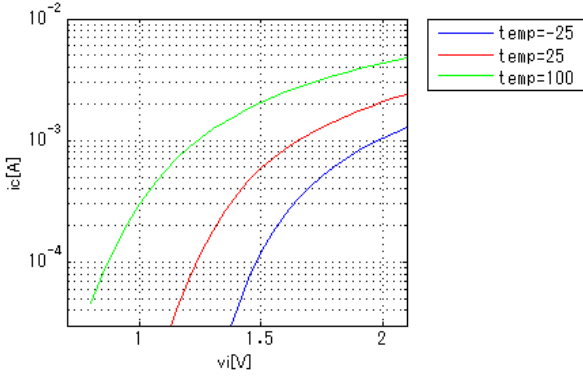
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	50	V
Base current (DC)	0	to	0.00018	A
Temperature	-55	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

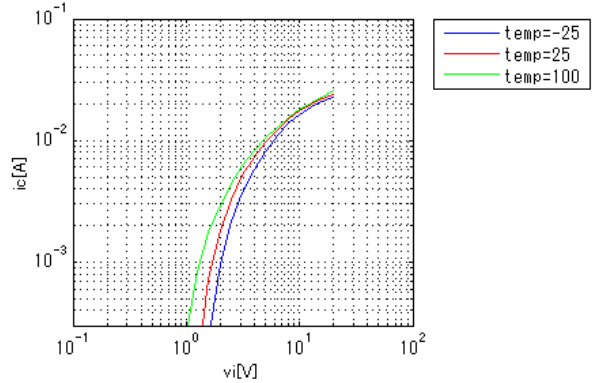
IcVi[OFF]

Vce = 5V



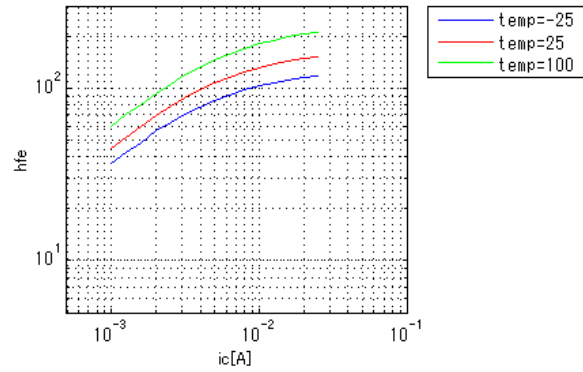
IcVi[ON]

Vce = 0.2V



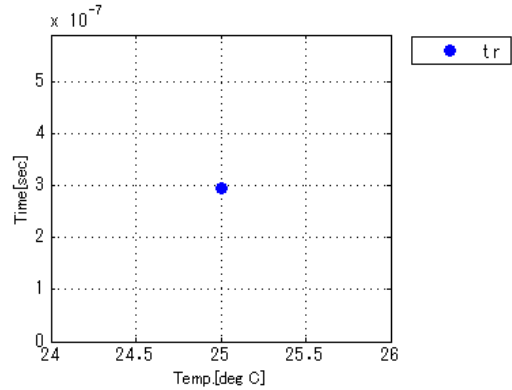
hFEIc[Temp]

Vce = 5V



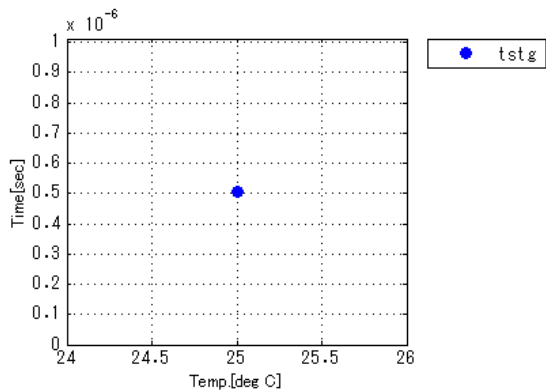
tr

VO = 5V, +VIN = 5V, -VIN = 0V, RL = 1000ohm



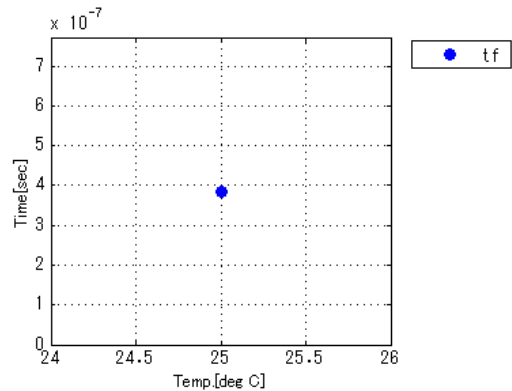
tstg

VO = 5V, +VIN = 5V, -VIN = 0V, RL = 1000ohm



tf

VO = 5V, +VIN = 5V, -VIN = 0V, RL = 1000ohm



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