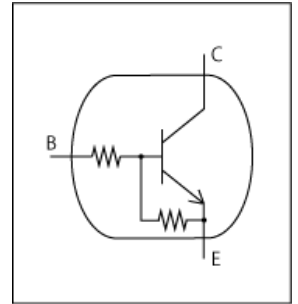


PSpice Model

BRT (Bias Resistor Transistor)

TOSHIBA

RN1403



Model Information

Model A macro model based on Mextram model
Call Name MDC_RN1403_PS
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_RN1403_PS02.lib
 Model Report MDC_RN1403_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 Unknown
- Product name RN1403
- Company name Toshiba Corporation
- Characteristics IcVi[OFF],IcVi[ON],hFEIc[Temp],Vce(sat)Ic[Temp]

Simulation Range

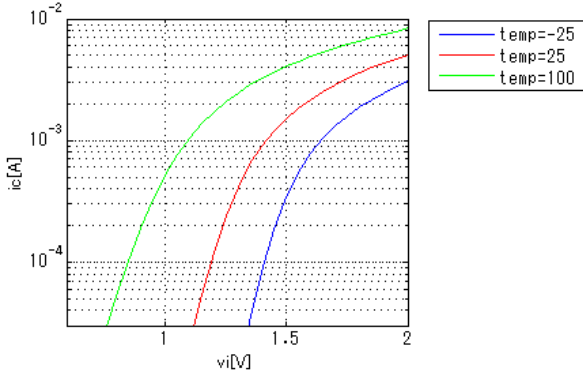
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

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

Simulation results are following.
 Explanatory notes — : simulated

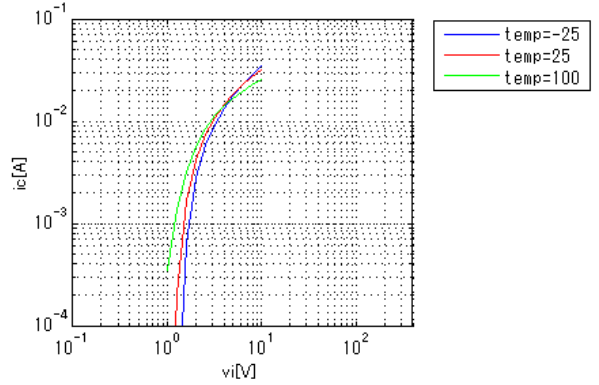
IcVi[OFF]

Vce = 5V



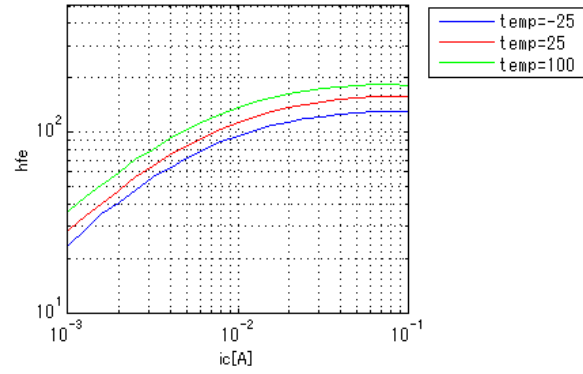
IcVi[ON]

Vce = 0.2V



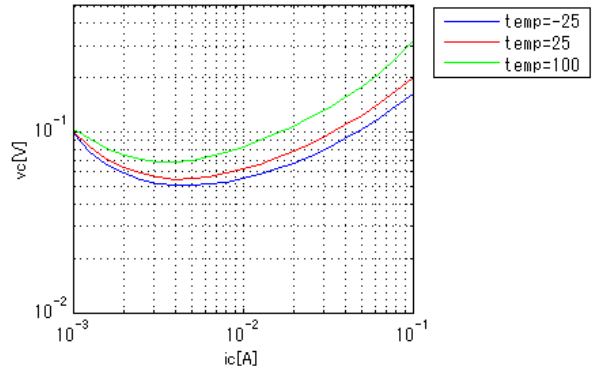
hFEIc[Temp]

Vce = 5V



Vce(sat)Ic[Temp]

IC/IB = 20



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