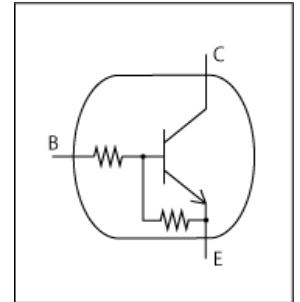


PSpice Model

BRT (Bias Resistor Transistor)

Isahaya Electronics Corporation

RT1N141M



Model Information

Model A macro model based on Gummel-Poon model
Call Name MDC_RT1N141M_PS
Pin Assign 1:E 2:C 3:B
File List Model Library MDC_RT1N141M_PS01.lib
 Model Report MDC_RT1N141M_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 2016/11
- Product name RT1N141M
- Company name Isahaya Electronics Corporation
- Characteristics hFEIc[Temp],IcVi[OFF],IcVi[ON],Vce(sat)Ic[Temp]

Simulation Range

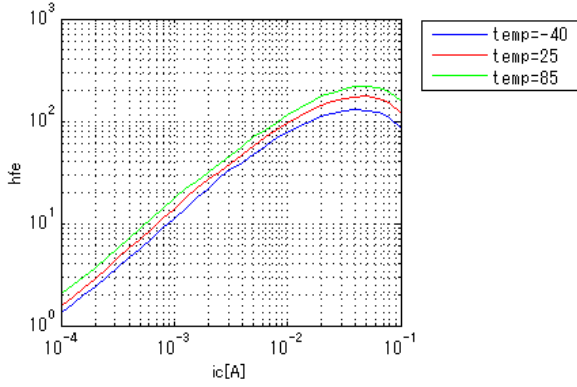
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	50	V
Base current (DC)	0	to	5	A
Temperature	-55	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

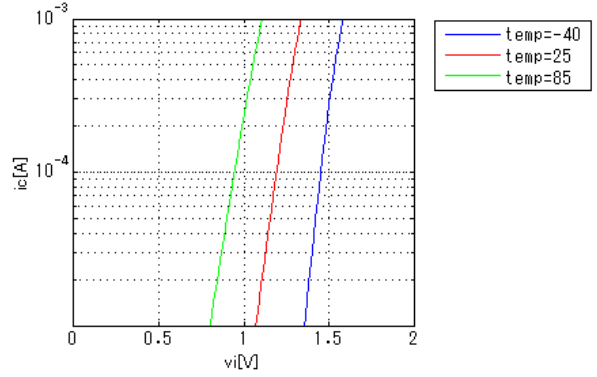
hFEIc[Temp]

Vce = 5V



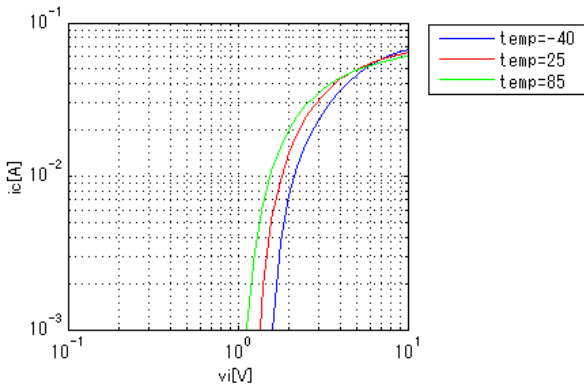
IcVi[OFF]

Vce = 5V



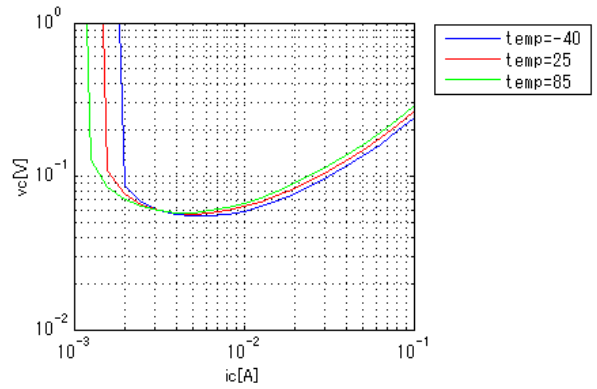
IcVi[ON]

Vce = 0.2V



Vce(sat)Ic[Temp]

IC/IB = 20



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