

LTspice Model

NPN

Isahaya

2SC3441



Model Information

Model Gummel-Poon model
Call Name MDC_2SC3441_LT
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_2SC3441_LT01.lib
 Model Report MDC_2SC3441_LT.pdf (this file)

Verified Simulator Version LTspice version XVII
Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 2017/5
- Product name 2SC3441
- Company name Isahaya Electronics Corporation
- Characteristics $I_{cVce}[I_b], h_{FE}I_{c[Vce]}, I_{cVbe}[Temp], V_{ce(sat)}I_{c[hFE]}, f_{T}I_{c[Vce]}$

Simulation Range

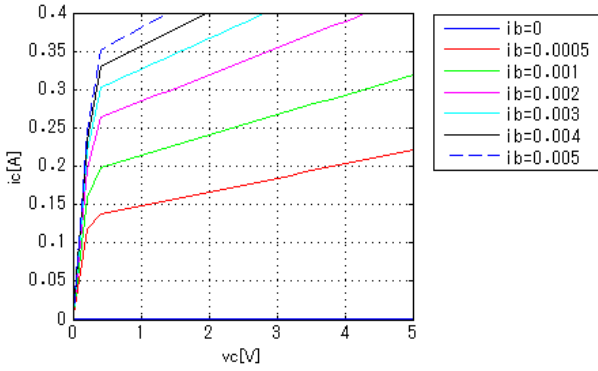
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	50	V
Base current (DC)	0	to	0.02	A
Temperature	-55	to	150	deg C

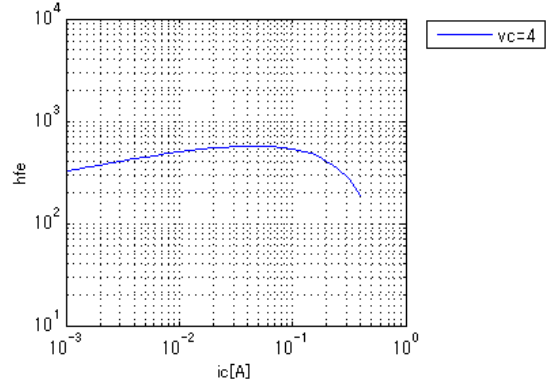
Simulation results are following.
 Explanatory notes — : simulated

IcVce[ib]

Temp. = 25deg C

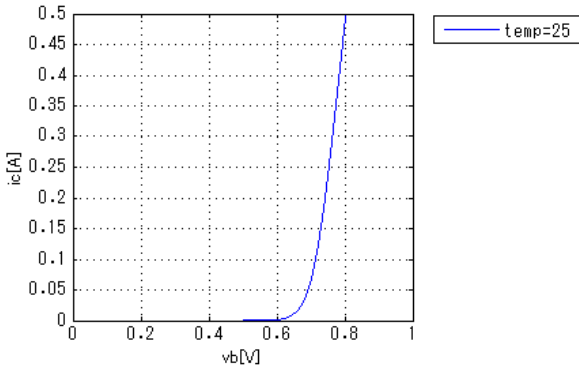


hFEIc[Vce]

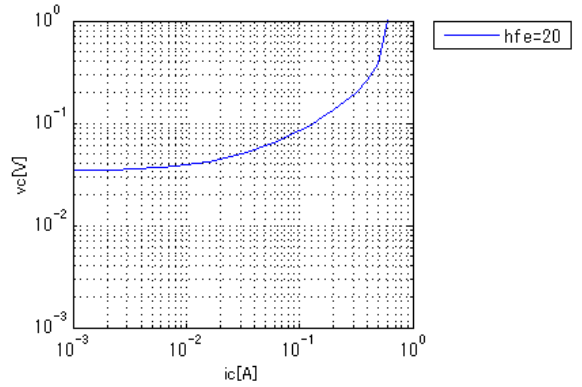


IcVbe[Temp]

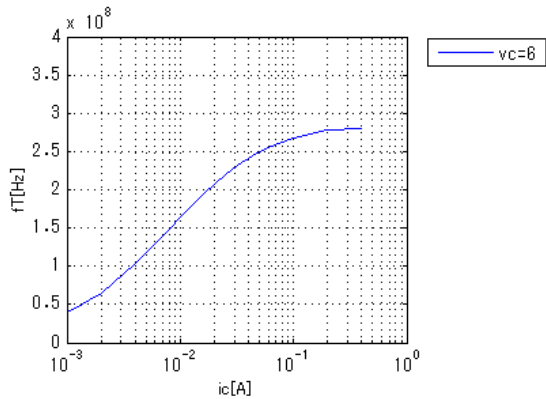
Vce = 4V



Vce(sat)Ic[hFE]



fT Ic[Vce]



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MoDeCH Inc.

Head Office

Location: Mitsuseimei Hachioji Bldg., 5-15 Yokoyama-cho, Hachioji-Shi, Tokyo 192-0081, Japan

Tel:+81-42-656-3360

E-Mail:model-on-support@modech.co.jp

URL:<http://www.modech.com/en/>