

LTspice Model

PNP

Comchip

MMBT5401-G



Model Information

Model Gummel-Poon model
Call Name MDC_MMBT5401-G_LT
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_MMBT5401-G_LT01.lib
 Model Report MDC_MMBT5401-G_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 REV:B
- Product name MMBT5401-G
- Company name Comchip Technology Co., Ltd.
- Characteristics Vce(sat)Ic[Temp],hFEIc[Temp],IcVbe[Temp],fTlc[Vce]

Simulation Range

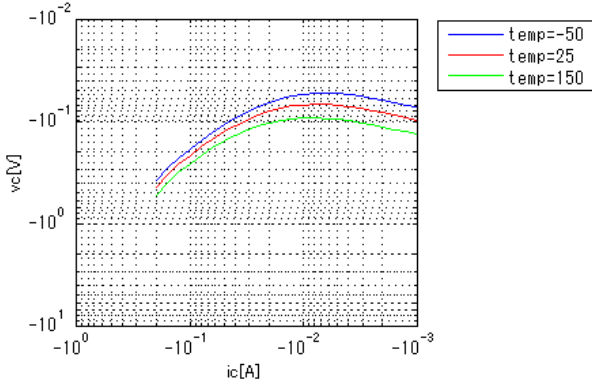
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

| Item | Range | | | Unit |
|--------------------------------|-------|----|--------|-------|
| | Min. | | Max. | |
| Collector-emitter voltage (DC) | 0 | to | -150 | V |
| Base current (DC) | 0 | to | -0.060 | A |
| Temperature | -55 | to | 150 | deg C |

Simulation results are following.
 Explanatory notes — : simulated

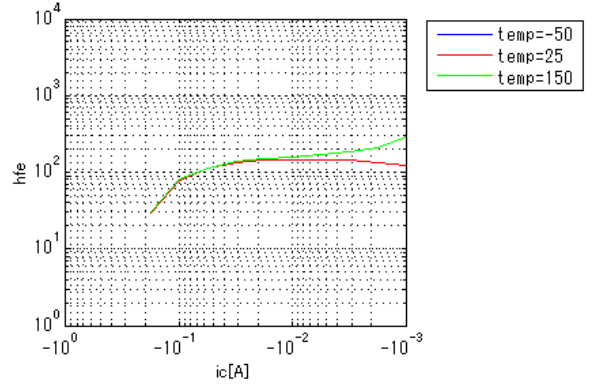
Vce(sat)Ic[Temp]

IC/IB = 10



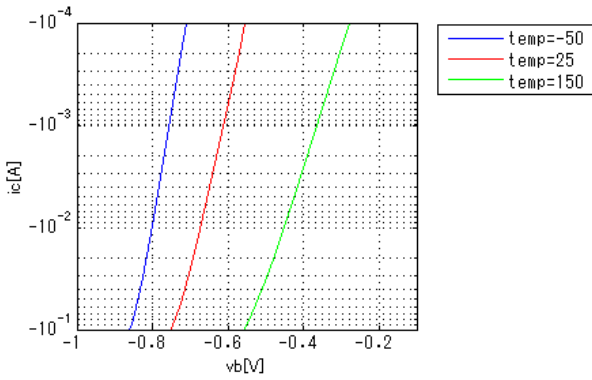
hFEIc[Temp]

Vce = -5V

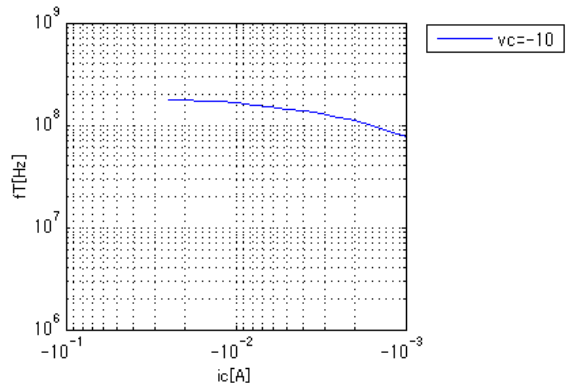


IcVbe[Temp]

Vce = -5V



fT[Ic]



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