

PSpice Model

NPN

TOSHIBA

2SC2873



Model Information

Model Mextram model
Call Name MDC_2SC2873_PS
Pin Assign 1:C 2:B 3:E
File List Model Library MDC_2SC2873_PS01.lib
 Model Report MDC_2SC2873_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 nov 2013
- Product name 2SC2873
- Company name Toshiba Corporation
- Characteristics $I_{cV_{ce}}$, $h_{FE}I_{c}$ [Temp], $V_{ce(sat)}I_{c}$ [Temp], $V_{be(sat)}I_{c}$ [Temp], I_{c} V_{be} [Temp]

Simulation Range

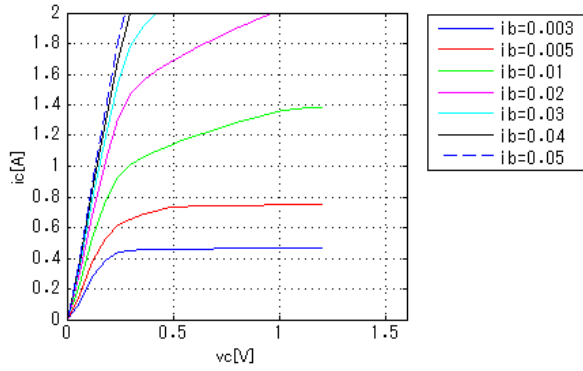
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	50	V
Base current (DC)	0	to	0.4	A
Temperature	-55	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

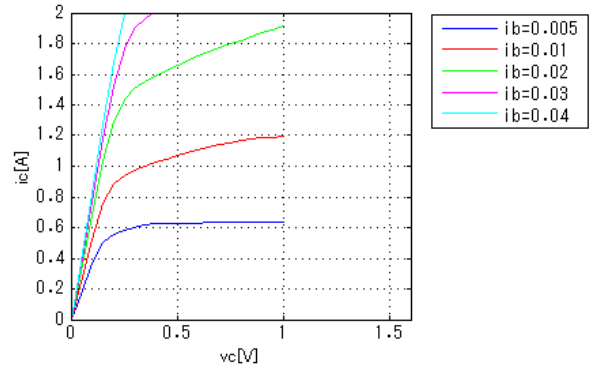
IcVce[ib]

Temp. = 100deg C



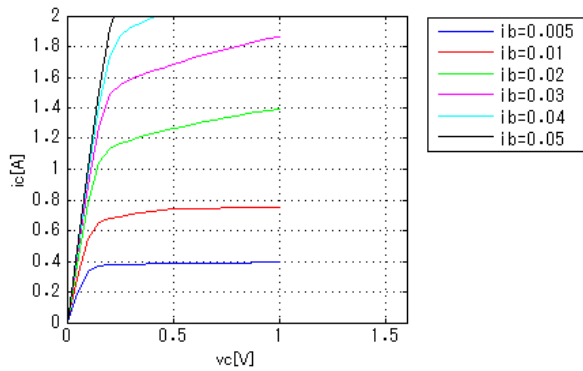
IcVce[ib]

Temp. = 25deg C



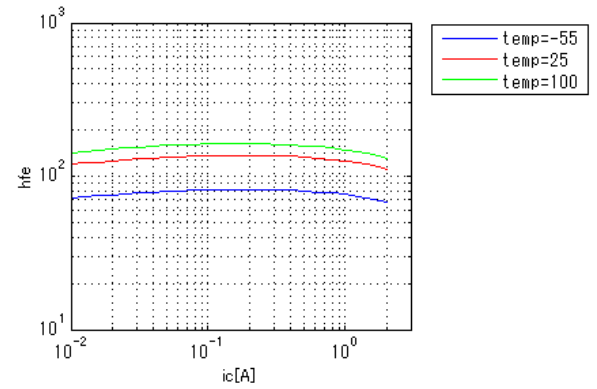
IcVce[ib]

Temp. = -55deg C



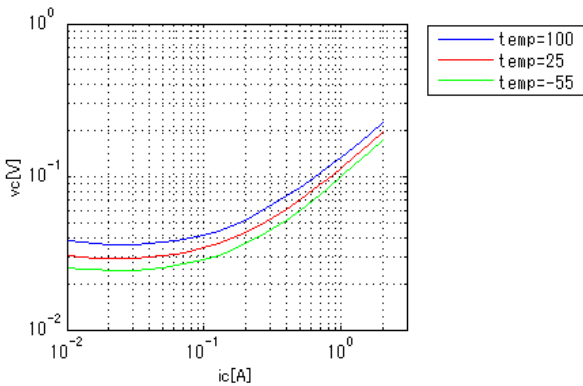
hFEIc[Temp]

Vce = 2V



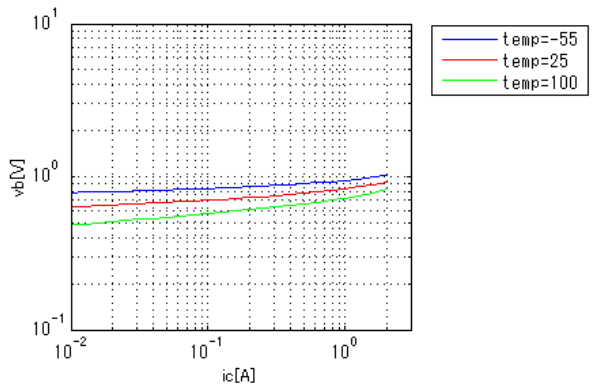
Vce(sat)Ic[Temp]

IC/IB = 20



Vbe(sat)Ic[Temp]

IC/IB = 20

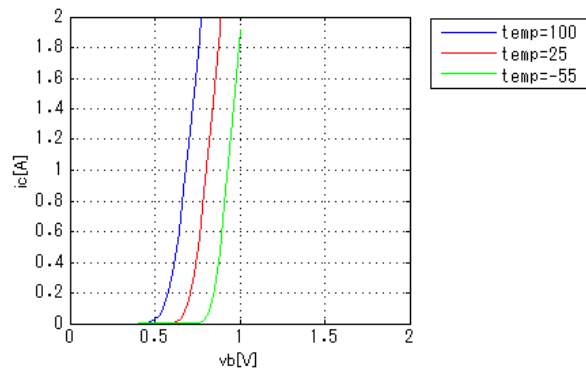


Simulation results are following.

Explanatory notes — : simulated

IcVbe[Temp]

Vce = 2V



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