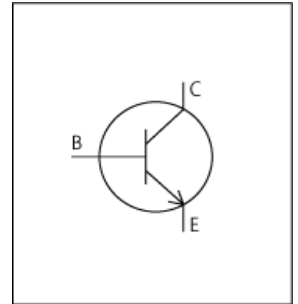


LTspice Model

NPN

Nexperia

PMST2369



Model Information

Model	Gummel-Poon model		
Call Name	MDC_PMST2369_LT		
Pin Assign	1:B 2:E 3:C		
File List	Model Library	MDC_PMST2369_LT01.lib	
	Model Report	MDC_PMST2369_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 1999 Apr 22
- Product name PMST2369
- Company name Nexperia B.V.
- Characteristics $h_{FE}(I_c, T_{case}), f_T(I_c, V_{ce}), V_{ce(sat)}(I_c, T_{case}), V_{be(sat)}(I_c, T_{case}), C_{ob}, SwitchingI_{cc}(T_{name}), SwitchingWaveform$

Simulation Range

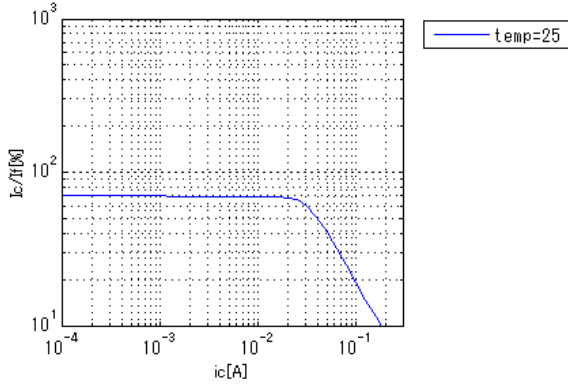
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	40	V
Collector current (DC)	0	to	200m	A
Temperature	-65	to	150	deg C

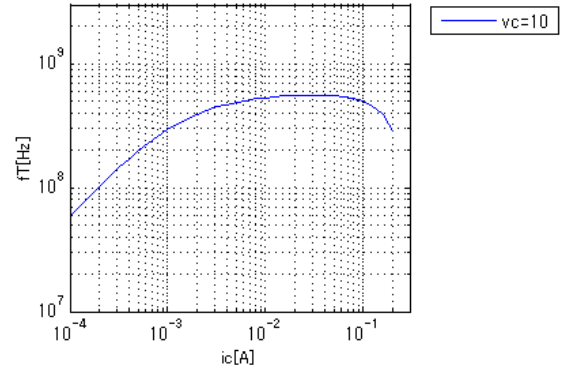
Simulation results are following.
 Explanatory notes — : simulated

hFEIc[Temp]

Vce = 1V

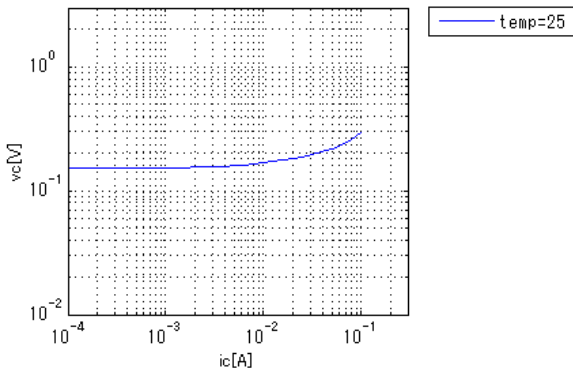


fT[Ic[Vce]]



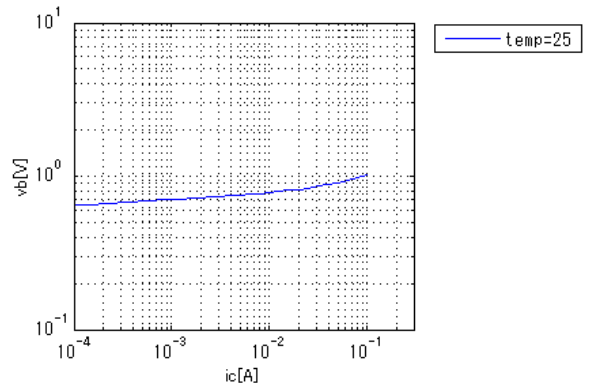
Vce(sat)Ic[Temp]

IC/IB = 10



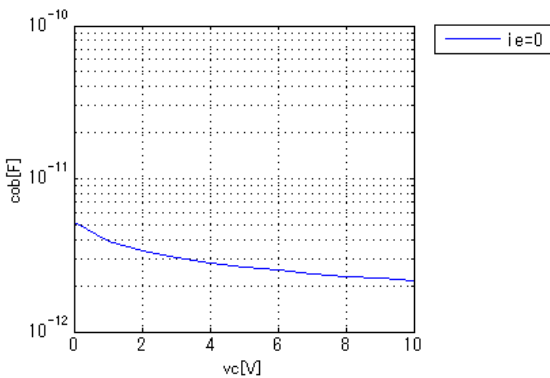
Vbe(sat)Ic[Temp]

IC/IB = 10



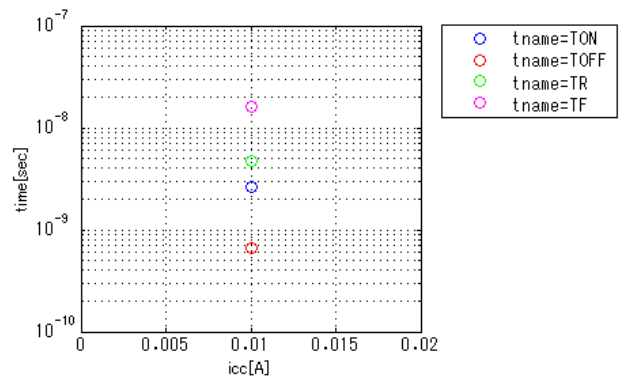
Cob

Freq. = 1MHz



SwitchingIcc[Tname]

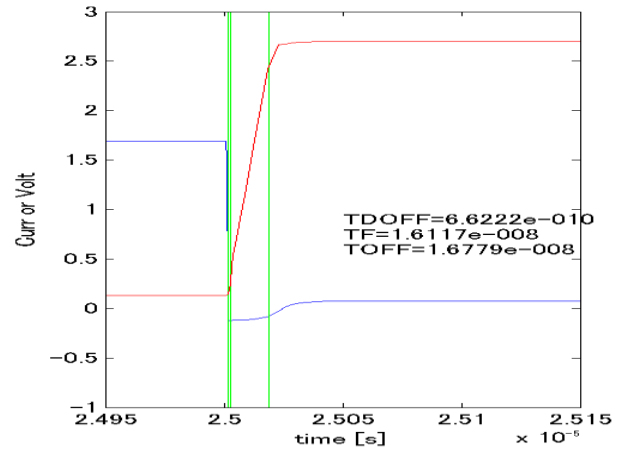
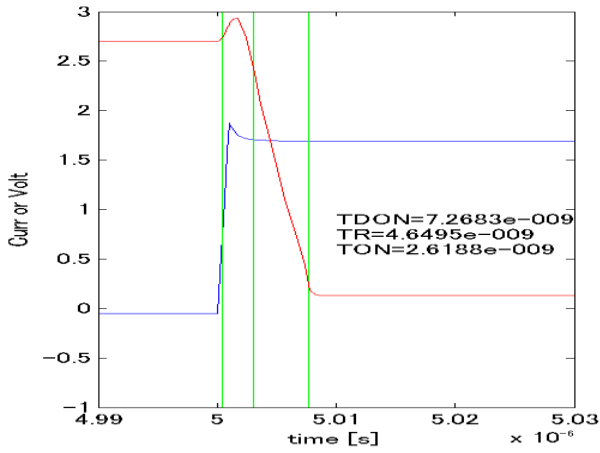
ibb = 0.003A, vcc = 2.7V



Simulation results are following.
Explanatory notes — : simulated

SwitchingWaveform

INPUT : IB × 500 [A] OUTPUT : VC [V]



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