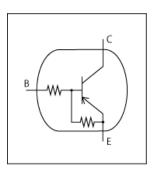


# PSpice Model BRT (Bias Resistor Transistor) TOSHIBA RN2102



# **Model Information**

 Model
 A macro model based on Mextram model

 Call Name
 MDC\_RN2102\_PS

 Pin Assign
 1:C 2:B 3:E

 File List
 Model Library Model Report
 MDC\_RN2102\_PS02.lib MDC\_RN2102\_PS.pdf (this file)

Verified Simulator Version Note

PSpice version 16.6

#### References

The information which was used for modeling is as follow:

[Data Sheet]
Date/Version
Product name
Company name

Characteristics

Unknown RN2102 Toshiba Corporation IcVi[OFF],IcVi[ON],hFEIc[Temp],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.

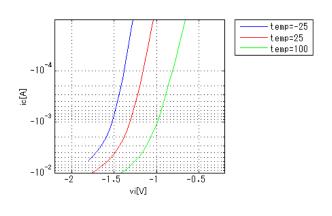
Item	Range			Unit
	Min.		Max.	
Collector-emitter voltage (DC)	0	to	-50	V
Temperature	-55	to	150	deg C



#### Simulation results are following. Explanatory notes — : simulated

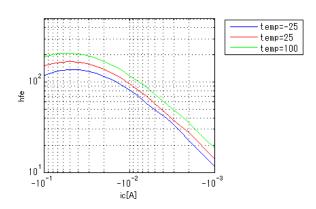
### lcVi[OFF]

Vce = -5V



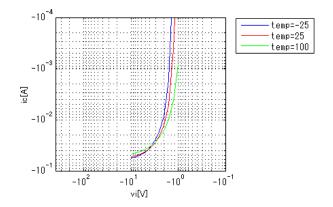
### hFEIc[Temp]

Vce = -5V



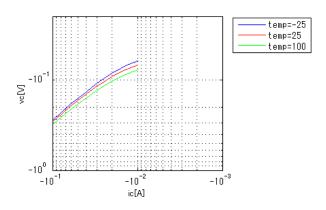
## lcVi[ON]

Vce = -0.2V



## Vce(sat)lc[Temp]

IC/IB = 20





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