

`bjt_npn_1.ece`

Description

`bjt_npn_1.ece` is an *npn* bipolar transistor. The real parameters have the same meaning as the BJT model implemented in SPICE 3.

The collector, base, and emitter currents are made available as output variables `ic`, `ib`, `ie`, respectively. The ratio i_c/i_b is made available as the output variable `ic_by_ib`, and the power absorbed by the BJT is made available as `pwr_elec`.

AC (small-signal) implementation of the model is also incorporated, following SPICE 3.