Attributes

```
ebe name=switch_1 x_inputs=yes
Jacobian: variable
nodes: p n
state_vars:
aux_vars:
aux_vars_startup:
x_vars: x
iparms:
sparms:
rparms:
+  r_on=1m
+  r_off=1M
+  v_on=0
+  x_high=1.0
stparms:
igparms:
outparms: i v
```

Description

switch_1.ebe is a switch connected between nodes p and n. Its eqivalent circuit is shown in the figure. When the controlling input x is greater than $x_{high}/2$, R' is equal to r_on; otherwise, it is r_off. The branch current and branch voltage are made available as output variables i and v, respectively.
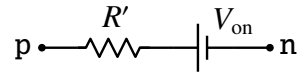

Figure 1: Equivalent circuit of switch_1.ebe.