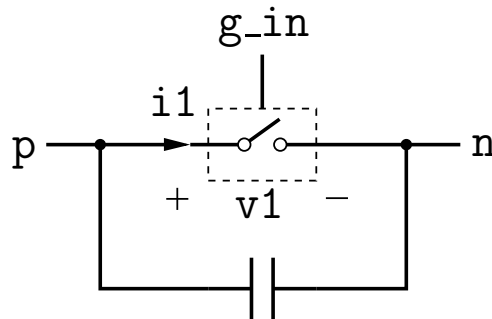


## switch\_g1\_cap.ece



### Attributes

```
mainnodes: p n
outvar: i1=cur(p)_of_s1 v1=v1_of_s1
main_var: g_in
rparms:
+ ron=1.0m
+ roff=1.0M
+ g_high=1.0
+ v_on=0
+ cap=10n
```

### Description

`switch_g1.ece` is a switch which behaves like a resistance  $R_{\text{on}}$  when closed and  $R_{\text{off}}$  when open. If  $g_{\text{in}} > g_{\text{high}}/2$ , the switch is closed; else it is open. The values of  $R_{\text{on}}$  and  $R_{\text{off}}$  are specified by the real parameters `ron` and `roff`, respectively.

If the real parameter `v_on` is non-zero, it serves as the voltage drop across the switch when it is conducting. In that case, the equivalent circuit of the switch is a resistance `ron` in series with a voltage source `v_on`.

A capacitance `cap` is added in parallel. In some cases, it may help in addressing convergence issues.

The branch voltage `v1` and the branch current `i1` are made available as output variables.

AC behaviour is not implemented.