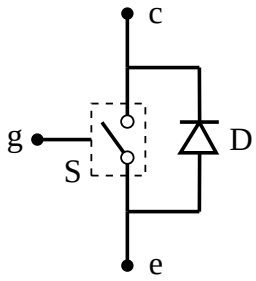
switch_diode_g.ece



Attributes

```
  mainnodes: c e
  outvar:
+   is=cur(p)_of_s
+   id=cur(p)_of_d
  main_var: g
  rparms:
+   ron=1e-3
+   roff=1M
+   g_high=1.0
+   v_on_d=0
+   v_on_s=0
```

Description

`switch_diode_g.ece` is parallel combination of a switch ("S" in the figure) and an idealized diode ("D" in the figure). The value of the general variable `g` determines if the switch S is open (i.e., resistance=`roff`) or closed (i.e., resistance=`ron`). If `g` > `g_high`/2, S is closed, else it is open. The diode D is an idealized diode with on resistance `ron` and off resistance `roff`. The switch current (from `c` to `e`) and the diode current (from `e` to `c`) are made available as output variables.

The real parameters `v_on_s` and `v_on_d` are used to specify the `v_on` values for the switch `s` and diode `d`, respectively.

AC behaviour is not implemented.