

## diode\_r.ebe

### Attributes

```
ebe name=diode_r
Jacobian: variable
nodes: p n
state_vars:
aux_vars:
aux_vars_startup:
x_vars:
iparms:
sparms:
rparms:
+ r_on=0.1
+ r_off=1M
+ v_on=0
+ v_on_1=0
stparms:
igparms:
outparms: i v
```

### Description

diode\_r.ebe is an idealised diode connected between nodes p and n. Its resistance is r\_on when the branch voltage ( $v_p - v_n$ ) is greater than v\_on, and r\_off otherwise. The branch current and branch voltage are made available as output variables i and v, respectively.