diode_spice.ebe

Attributes

```
ebe name=diode_spice
Jacobian: variable
nodes: p n
state_vars: qd0 qd1
aux_vars:
aux_vars_startup: id_s
x_vars:
iparms:
sparms:
rparms:
+   af=0.0
+   area=1.0
+   bv=100
+   bvj=100
+   cjo=1p
+   eg=1.11
+   fc=0.5
+   ibv=0.001
+   is=1e-14
+   kf=0.0
+   m=0.5
+   n0=1.0
+   tnom=300.15
+   tt=0.0
+   vj=1.0
+   xti=3.0
+   t1=300.15
+   vth=0
+   vth_nom=0
+   f1=0
+   f2=0
+   f3=0
+   fcp=0
+   ibv_calc=0
+   is_temp=0
+   cur_max=1e3
+   k_crit=0
stparms:
igparms:
outparms: i v
```

Description

diode_spice is the SPICE-3 diode model. The parameters bv, eg, fc, ibv, is, m, n0, vj, xti, have the same meaning as in the SPICE-3 diode model. t1 is the diode temperature in °K. Other parameters are computed within the ebe template.

The branch current and branch voltage are made available as output variables i and v, respectively.