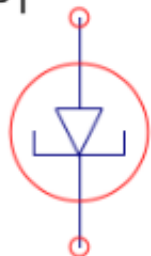


P1



N1

TD2

VT=0.025

Is=1e-12

Ip=1e-5

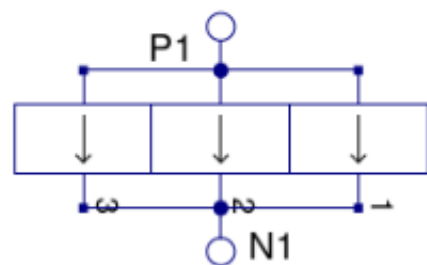
Iv=1e-6

Vp=0.1

Vv=0.4

K=5

C=0.01p

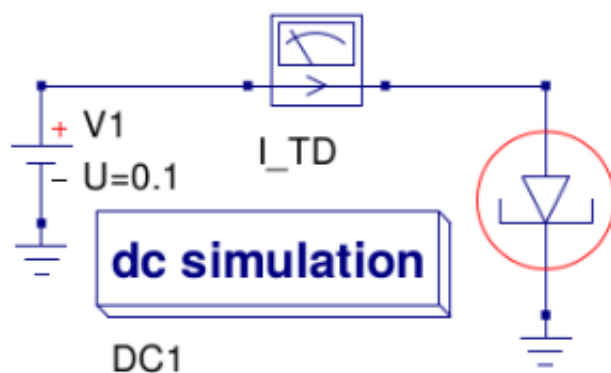


D1

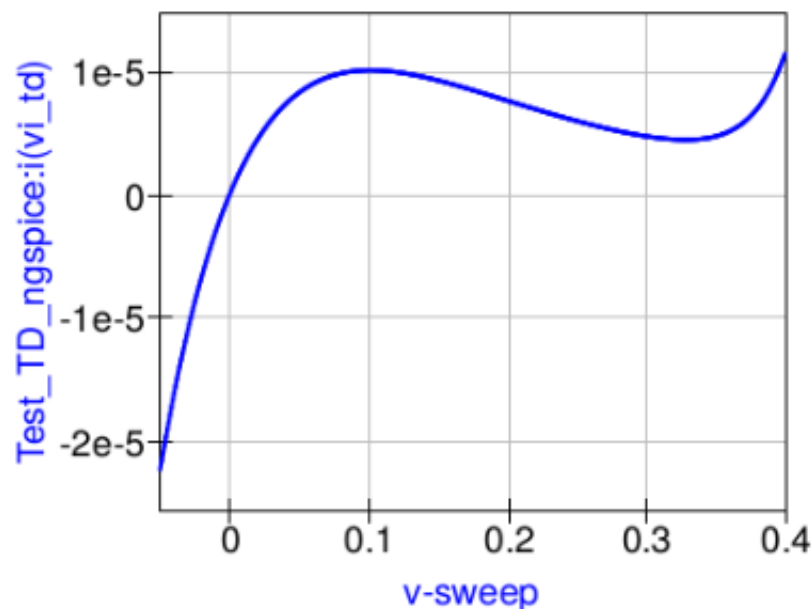
$$I1 = I_s \cdot (\exp(V1/V_T) - 1.0)$$

$$Q1 = C \cdot V1$$

$$I2 = I_v \cdot \exp(K \cdot (V1 - V_v))$$

$$I3 = I_p \cdot (V1/V_p) \cdot \exp((V_p - V1)/V_p)$$


DC1



TD1

VT=0.025

Is=1e-12

Ip=1e-5

Iv=1e-6

Vp=0.1

Vv=0.4

K=5

C=0.01p

**Parameter  
sweep**

SW1

Sim=DC1

Type=lin

Param=V1

Start=-0.05

Stop=0.4

Points=451