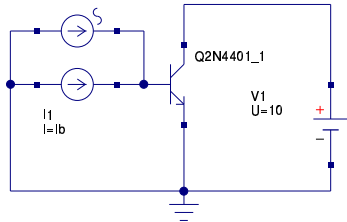


I_2
 $I = 1 \mu A$



**Parameter
sweep**

SW1
Sim=AC1
Type=lin
Param= I_b
Start=40u
Stop=240u
Points=3

ac simulation

AC1
Type=log
Start=1 kHz
Stop=1 GHz
Points=101

dc simulation

DC1

Equation

Eqn1
 $I_c = -V_1.I$
 $\beta = I_c / I_b$
 $I_b = I_2.I$