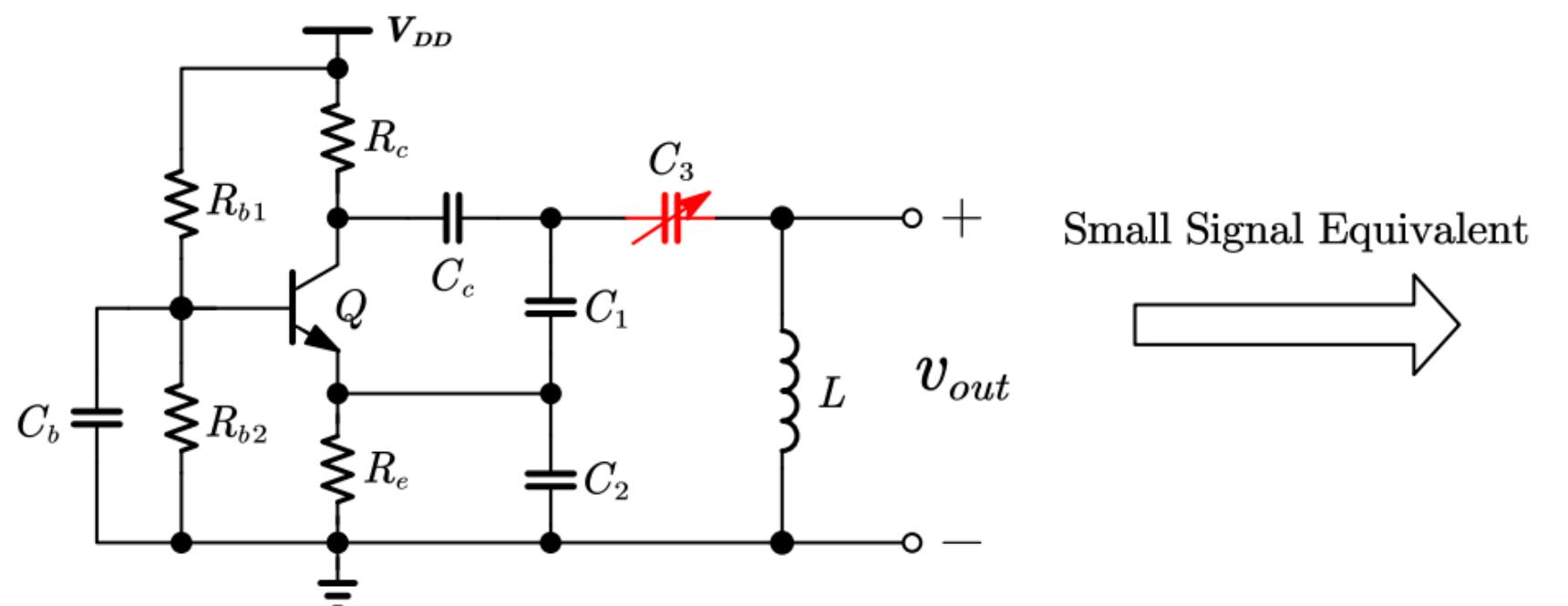
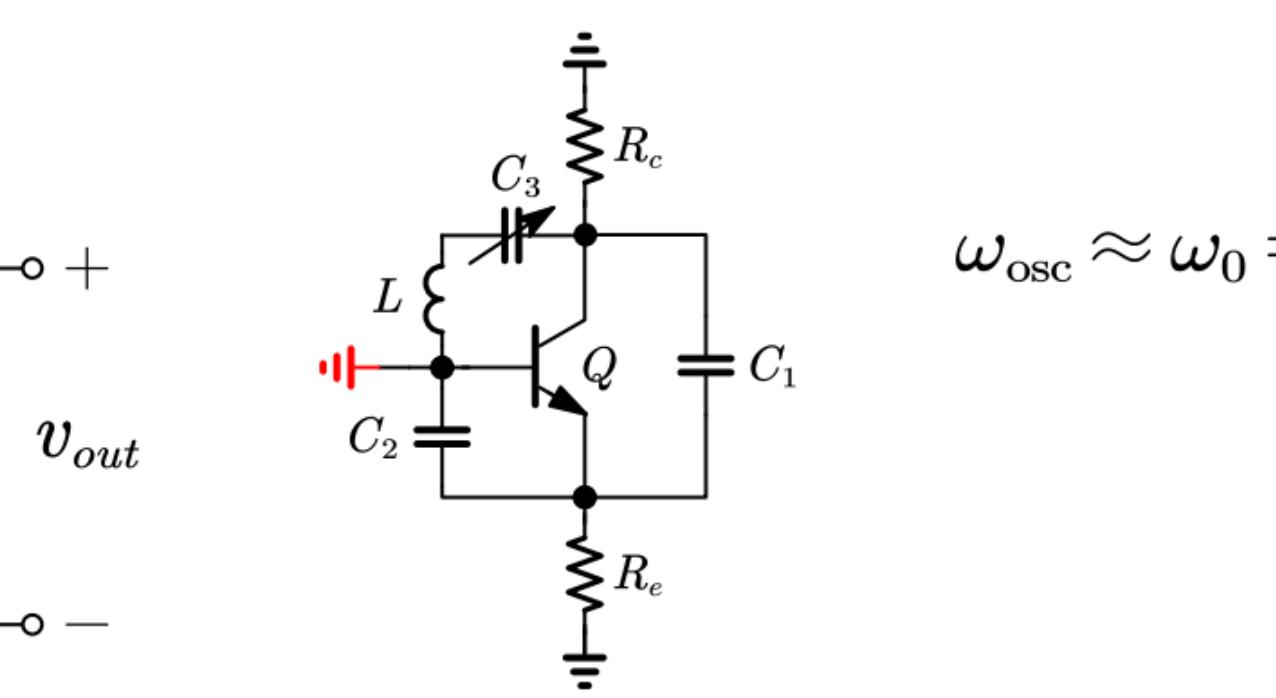


克拉泼振荡器

Clapp Oscillator (CB)



Small Signal Equivalent



C_3 越小，环路增益越小，如果 C_3 取值过小，振荡器就不能满足起振条件而无法工作

$$\omega_{\text{osc}} \approx \omega_0 = \frac{1}{\sqrt{L(C_1 \parallel C_2 \parallel C_3)}} \approx \frac{1}{\sqrt{LC_3}}, \quad C_3 \ll C_1, C_2$$
$$K = \frac{f_{\text{osc}, \max}}{f_{\text{osc}, \min}} = 1.1 \sim 1.2$$