



清华大学

# BJT放大电路

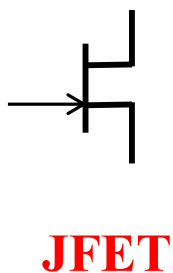
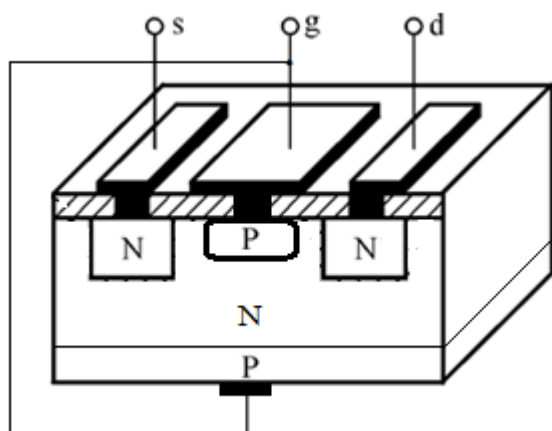
清华大学自动化系

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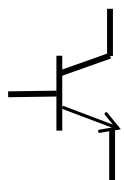
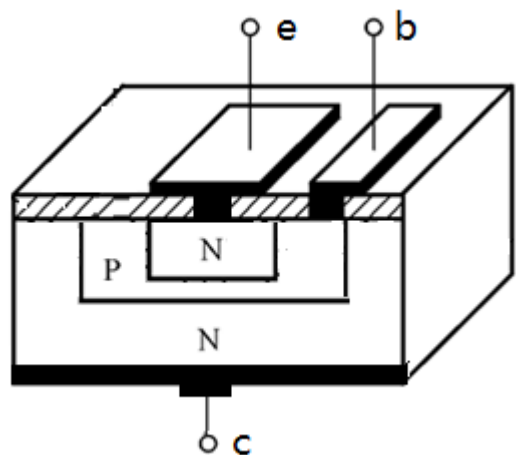


# 什么是BJT?

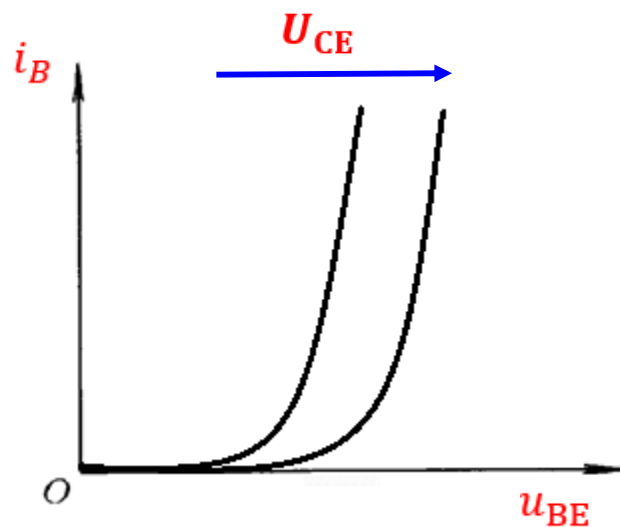
BJT: Bipolar Junction Transistor 双极型晶体管



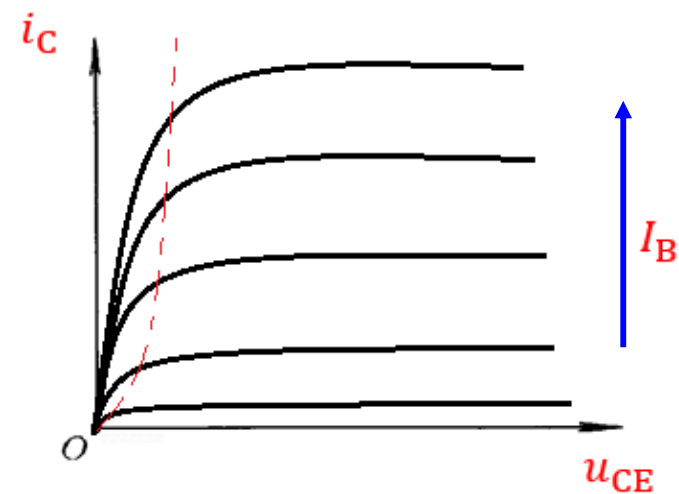
JFET



BJT



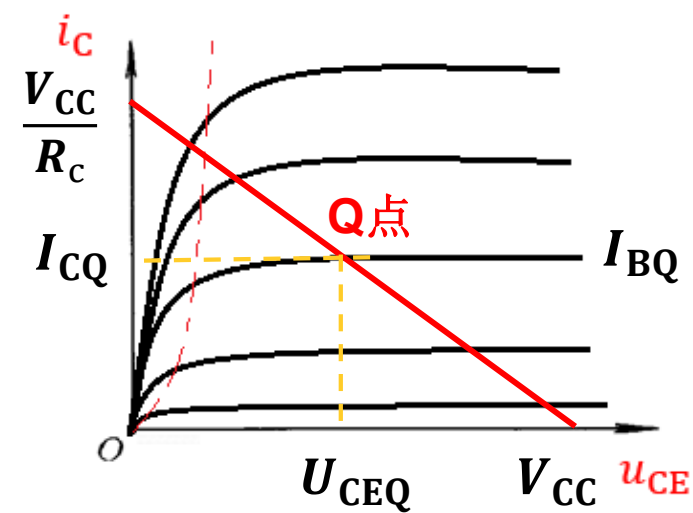
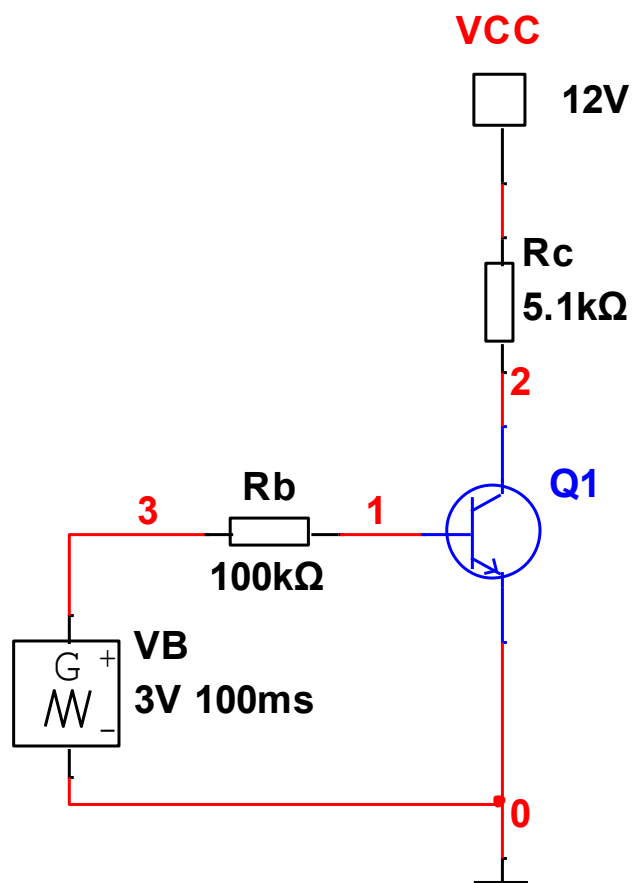
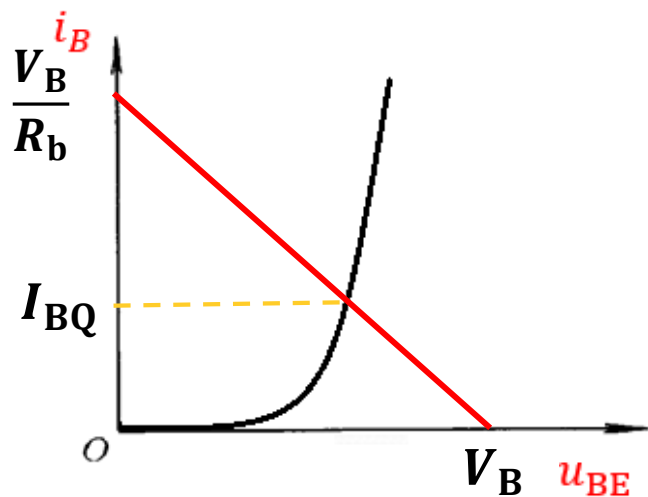
输入特性曲线



输出特性曲线

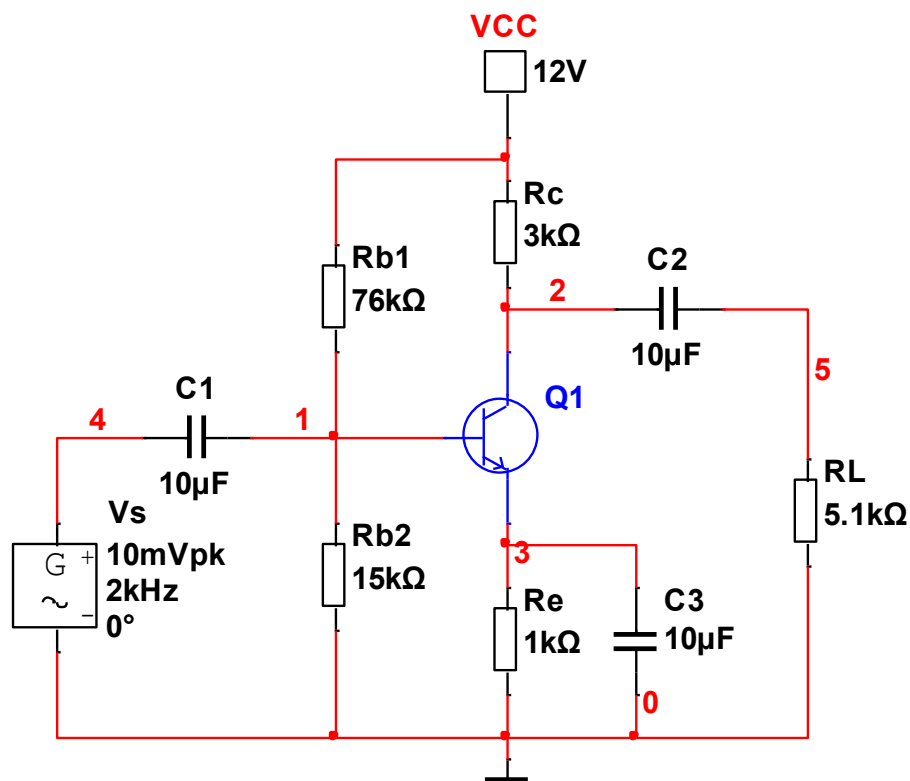


## 实验电路1:





## 实验电路2:

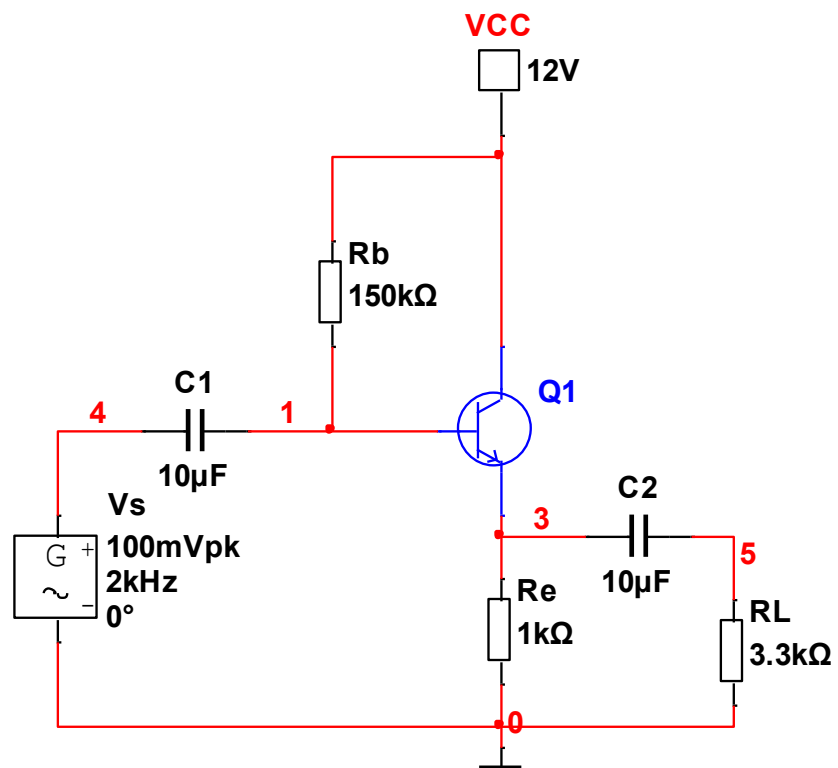


讨论:

- ✓  $R_{b1}$  和  $R_{b2}$  的取值
- ✓  $R_e$  的作用
- ✓ 电路出现问题, 如何调试



## 实验电路3:



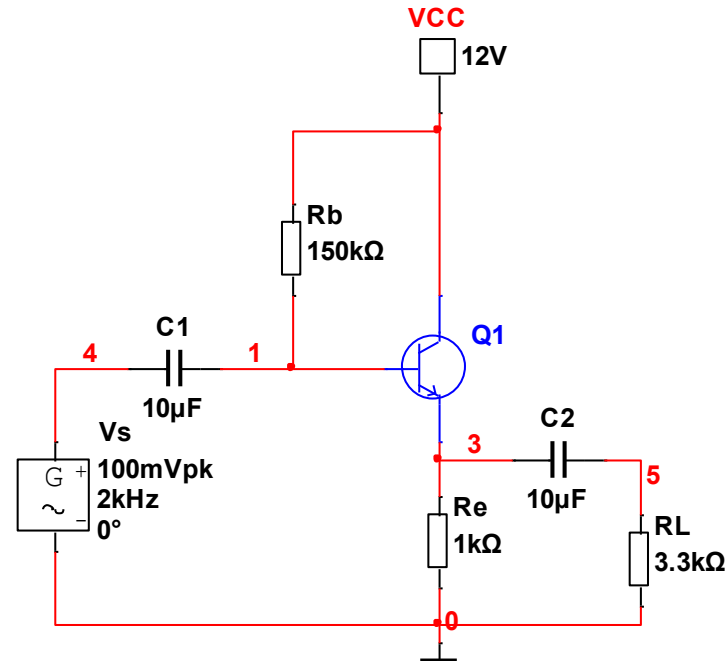
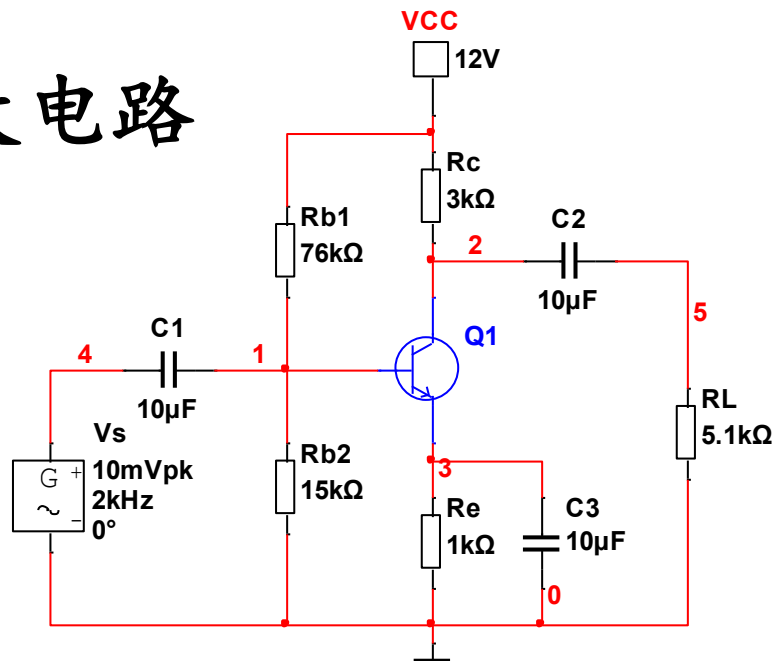


# 开放实验

对两种组态的BJT放大电路进行静态和动态特性研究，并粗略测量NPN晶体管的 $\beta$

观察共集放大电路的输入电阻和负载相关、输出电阻和信号源内阻有关

用PNP晶体管构成放大电路





欢迎投稿及交流~