

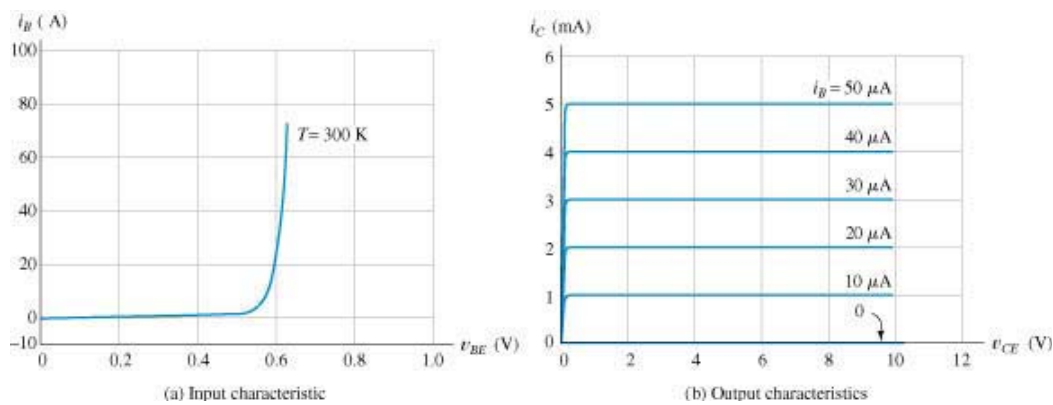
## Tutorial 8 Bipolar junction transistor (Basic concept)

### Question 1

A BJT has  $I_C=1$  mA and  $I_B=10$  uA. What are  $I_E$ ,  $\beta_F$  and  $\alpha_F$ ?

### Question 2

Using Device Curves of a bipolar junction transistor to determine its  $\alpha$  and  $\beta$ .



### Question 3

Compute transistor parameters:  $I_B$ ,  $I_C$ ,  $V_{BE}$ ,  $V_{CE}$  (Si BJT with  $\beta = 100$ ).

