

$$r_e = \frac{u_c}{i_c} \Big|_{i_a=0} = \frac{i_e \cdot (R_{BE} + R_E) + \beta i_e R_E}{i_e}$$

$$= r_{BE} + \beta R_E = \left( R_E + \frac{u_T}{i_{CA}} \right) \cdot \beta$$

$$\uparrow \frac{u_T}{i_{CA}} \cdot \beta$$

$$\approx 2,6$$

20  
√

$$\beta = 100 : 260 \Omega + 100 R_E = 2260 \Omega$$

$$200 : 520 \Omega + 200 R_E = 11720 \Omega$$

1  
56

$$r_a = \frac{i_a}{u_a} \Big|_{u_c=0} = \frac{1}{R_L} + g_{CE}$$

$$i_c = i_s \cdot e^{\frac{u_{BE}}{u_T}} \left( 1 + \frac{u_{CE}}{u_Y} \right)$$

$$\frac{d i_c}{d u_{CE}} = \frac{i_s e^{\frac{u_{BE}}{u_T}}}{u_Y} \Big|_{AP} = g_{CE}$$