

ЗЗ

$$U_{CB}^0 = 10 \text{ В}$$

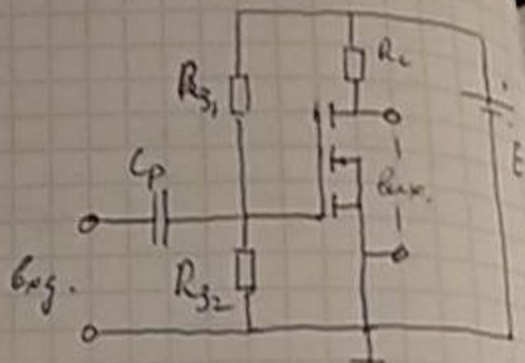
$$U_{SB}^0 = 5 \text{ В}$$

$$E = 40 \text{ В}$$

$$I_C = 100 \text{ мА}$$

$$f_H = 100 \text{ МГц}$$

$$R_{31} = 200 \text{ к}$$



$$R_C = \frac{E - U_{CB}^0}{I_C} = \frac{30}{0,1} = 300 \text{ Ом}$$

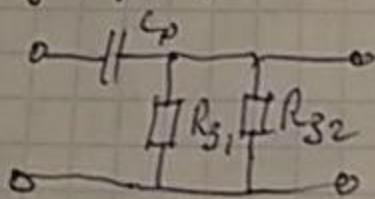
Значения R_{32} , C_p ,
 R_C

$$R_{32} = \frac{U_{SB}^0}{I_B} \gg I_B = \frac{U_{BE}^0}{R_{32}}$$

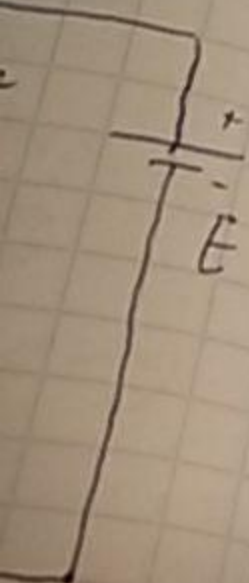
$$R_{31} = \frac{E - U_{BE}^0}{I_B} = \frac{E - U_{BE}^0}{U_{SB}^0} R_{32} \Rightarrow$$

$$\Rightarrow R_{32} = \frac{R_{31} \cdot U_{SB}^0}{E - U_{SB}^0} = \frac{200 \cdot 10^3 \cdot 5}{40 - 5} = 28,6 \text{ к}$$

Условие задать C_p включив его на вход
усилителя: и рассчитать емкость:



$$\frac{1}{R_3} = \frac{1}{R_{31}} + \frac{1}{R_{32}} \Rightarrow R_3 = 25 \text{ к}$$



$$\omega_H = 2\pi f_H = 2005 \text{ Hz}$$

$$\omega_H = \frac{1}{R_3 C_p} \Rightarrow C_p = \frac{1}{\omega_H R_3} = 637 \cdot \mu\text{F}$$