

№ 07-02

$$k_1 = 4$$

$$f_1 = 44 \text{ КГц}$$

$$i_1 = 16 \text{ В}$$

$$I_1 = 160 \text{ мВатт}$$

$$k_2 = 1$$

$$i_2 = 8 \text{ В}$$

$$I_2 = 10 \text{ мВатт}$$

$$t_1 = t_2$$

$$f_2 = ?$$

$$I_1 = k_1 \cdot i_1 \cdot f_1 \cdot t_1$$

$$I_2 = k_2 \cdot i_2 \cdot f_2 \cdot t_2$$

$$\frac{I_1}{I_2} = \frac{k_1}{k_2} \cdot \frac{i_1}{i_2} \cdot \frac{f_1}{f_2} \cdot \frac{t_1}{t_2} =$$

$$= 4 \cdot 2 \cdot \frac{f_1}{f_2} \cdot 1 = 16 \Rightarrow$$

$$\frac{f_1}{f_2} = \frac{16}{8} = 2 \Rightarrow f_2 = 22 \text{ КГц}$$

Ответ: 22