(2)

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$f_{MIN} = 100Hz$

$f_{MAX} = 1KHz$

$$f = \frac{1}{2 \cdot R_f \cdot C \cdot \ln\left(1 + \frac{2 \cdot R_1}{R_2}\right)}$$

$R_{f(MAX)} \rightarrow f_{MIN}$ $\quad R_{f(MAX)} = R_{f(MIN)} + R_p$

$R_{f(MIN)} \rightarrow f_{MAX}$ $\quad R_{f(MIN)} = R_{MIN}$

$$1 \times 10^3 = \frac{1}{2 \cdot R_{MIN} \cdot 0{,}22 \times 10^{-6} \times \ln\left(1 + 2 \times \frac{4{,}7 \times 10^3}{5{,}6 \times 10^3}\right)}$$

$$R_{MIN} = \frac{1}{2 \cdot 1 \times 10^3 \times 0{,}22 \times 10^{-6} \times \ln\left(1 + 2 \times \frac{4{,}7 \times 10^3}{5{,}6 \times 10^3}\right)}$$

$$R_{MIN} = 2{,}306\,K\Omega$$

$$R_{MAX} = \frac{1}{2 \times 100 \times 0{,}22 \times 10^{-6} \cdot \ln\left(1 + 2 \times \frac{4{,}7 \times 10^3}{5{,}6 \times 10^3}\right)} = 23{,}067\,K\Omega$$

$R_P = R_{MAX} - R_{MIN} = 20{,}761\ K\Omega$