

20 d

Zadatok

$$A(j\omega) = -10^5 \frac{(j\omega)^2 (10^4 + j\omega)}{(10 + j\omega)(10^2 + j\omega)(10^3 + j\omega)^2}$$

$$= -10^5 \frac{10 \left(\frac{j\omega}{10}\right)^2 \cdot 10^4 \left(1 + \frac{j\omega}{10^4}\right)}{10 \left(1 + \frac{j\omega}{10}\right) 10^2 \left(1 + \frac{j\omega}{10^2}\right) 10^3 \left(1 + \frac{j\omega}{10^3}\right)^2} = \frac{-10^5 \cdot 10 \cdot 10^4}{10 \cdot 10^2 \cdot 10^3} = \frac{-10^{10}}{10^6} = -10^4$$

$$A_0 = 20 \log(10^4) = 80 \text{ dB} \angle -180^\circ$$

