



Aufgabe 2) Lösung zum Bode-Diagramm.

$$\underline{E}(j\omega) = \frac{-\frac{10\omega}{\omega_0} \cdot \left(1 - j\frac{\omega}{\omega_0}\right)}{\left(1 - j\frac{10\omega}{\omega_0}\right)^2 \left(1 + j\frac{\omega}{10\omega_0}\right)} = \underline{Z}_0 \underline{E}_1 \underline{E}_2 \underline{E}_3 \underline{E}_4 \underline{E}_5 \quad \text{mit}$$

$$\underline{Z}_0 = -10, \quad \underline{E}_1 = \frac{\omega}{\omega_0}, \quad \underline{E}_2 = 1 - \frac{j\omega}{\omega_0}, \quad \underline{E}_3 = \underline{E}_4 = \frac{1}{1 - \frac{j\omega}{10\omega_0}}, \quad \underline{E}_5 = \frac{1}{1 + \frac{j\omega}{10\omega_0}}.$$

