

Bode Diagram Example

- Bode diagram of

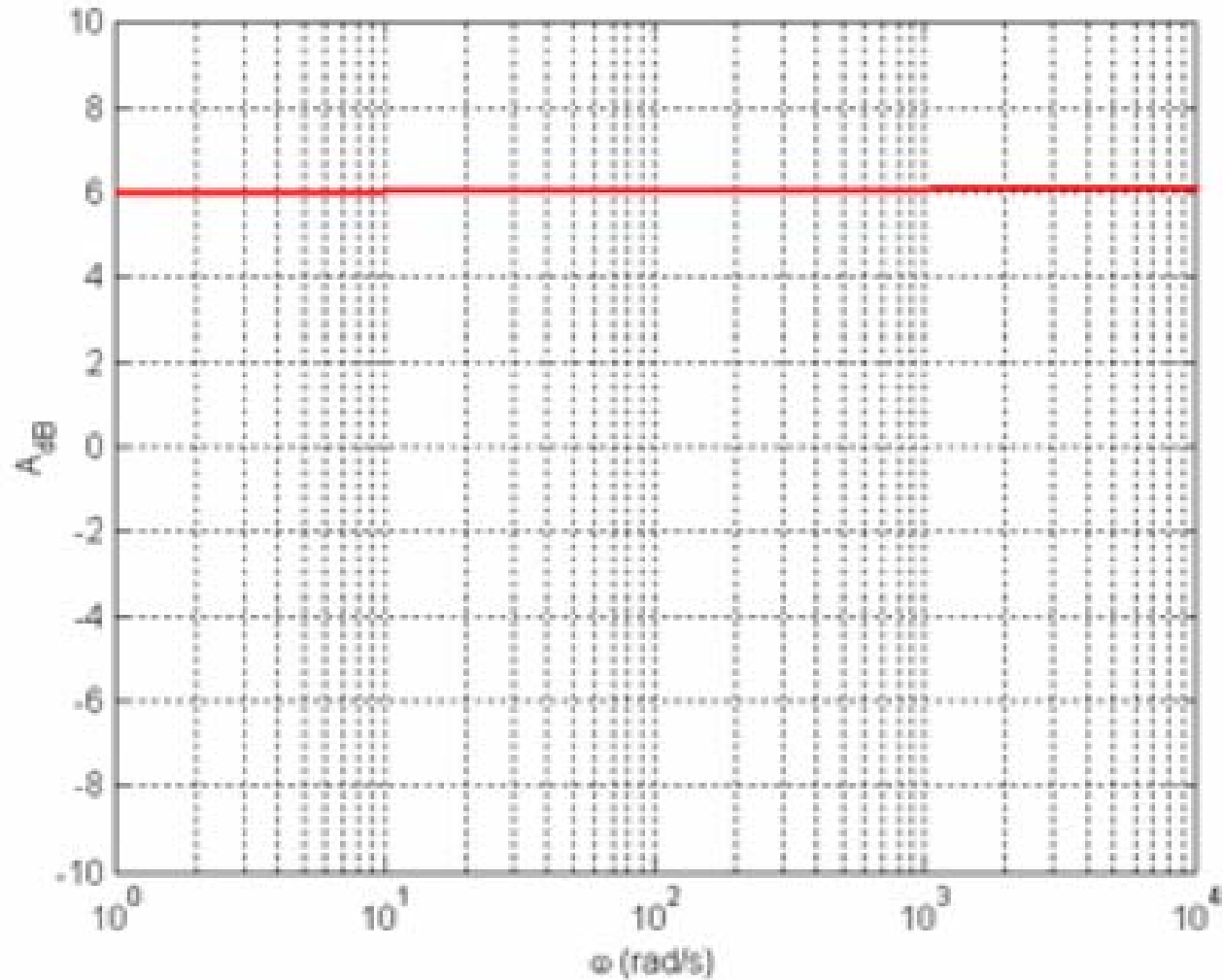
$$G = 2 \frac{(1 + 0.1s)}{s(1 + 0.01s)}$$

$$A_{dB} = 20 \log \left(2 \frac{1}{|j\omega|} \frac{|1 + 0.1j\omega|}{|1 + 0.01j\omega|} \right)$$

$$= 20 \log(2) + 20 \log|1 + 0.1j\omega|$$

$$- 20 \log|j\omega| - 20 \log|1 + 0.01j\omega|$$

$$A_{dB} = 20 \log(2) = 6dB$$



$$A_{dB} = -20 \log |j\omega|$$

