

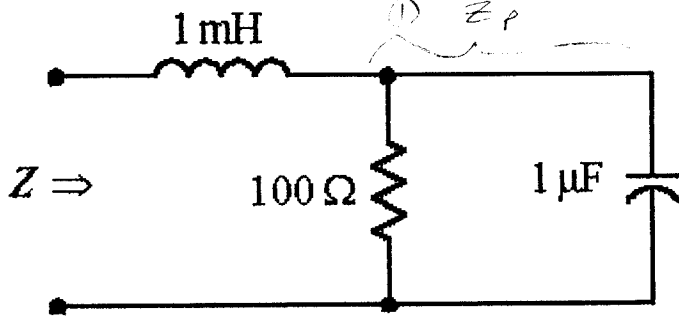
#3

Z_p

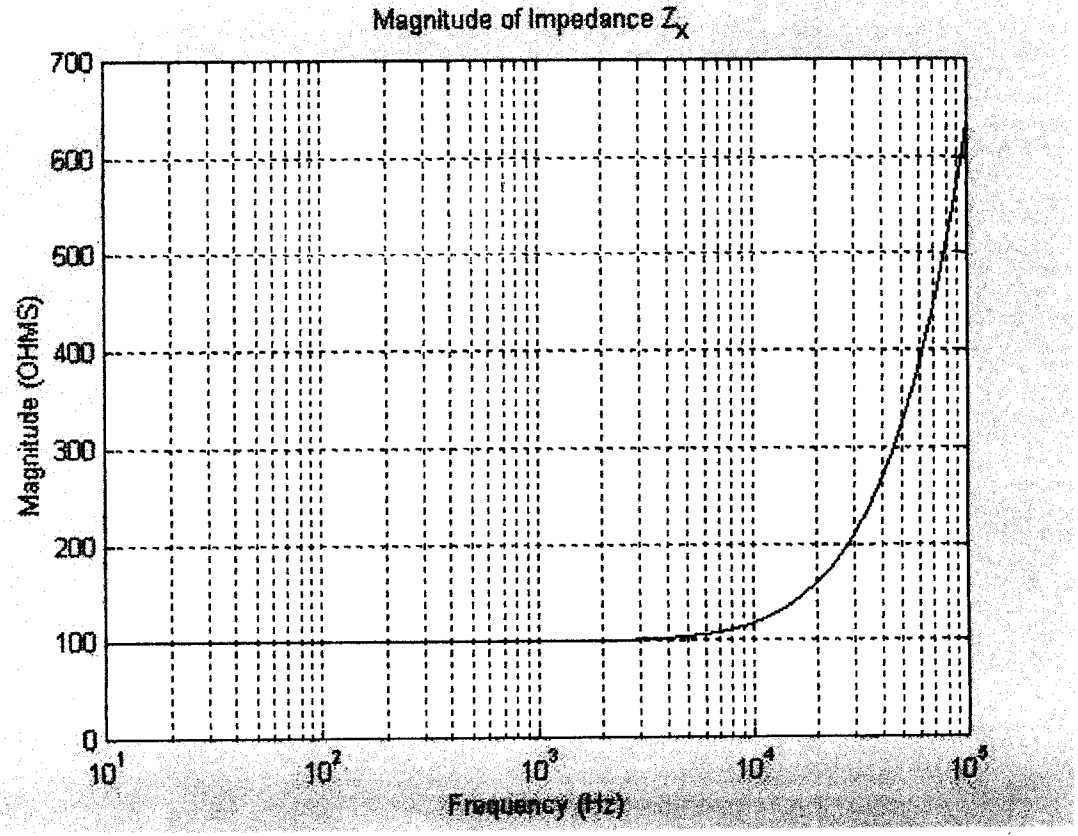
$$\frac{1}{\frac{1}{100} - j(\frac{1}{2} \pi f L)}$$

$$\frac{1}{\frac{1}{100} - j \frac{\pi f (10^{-3})}{2}} = .01 - j f \cdot 0.000094 \text{ Ohm } \phi$$

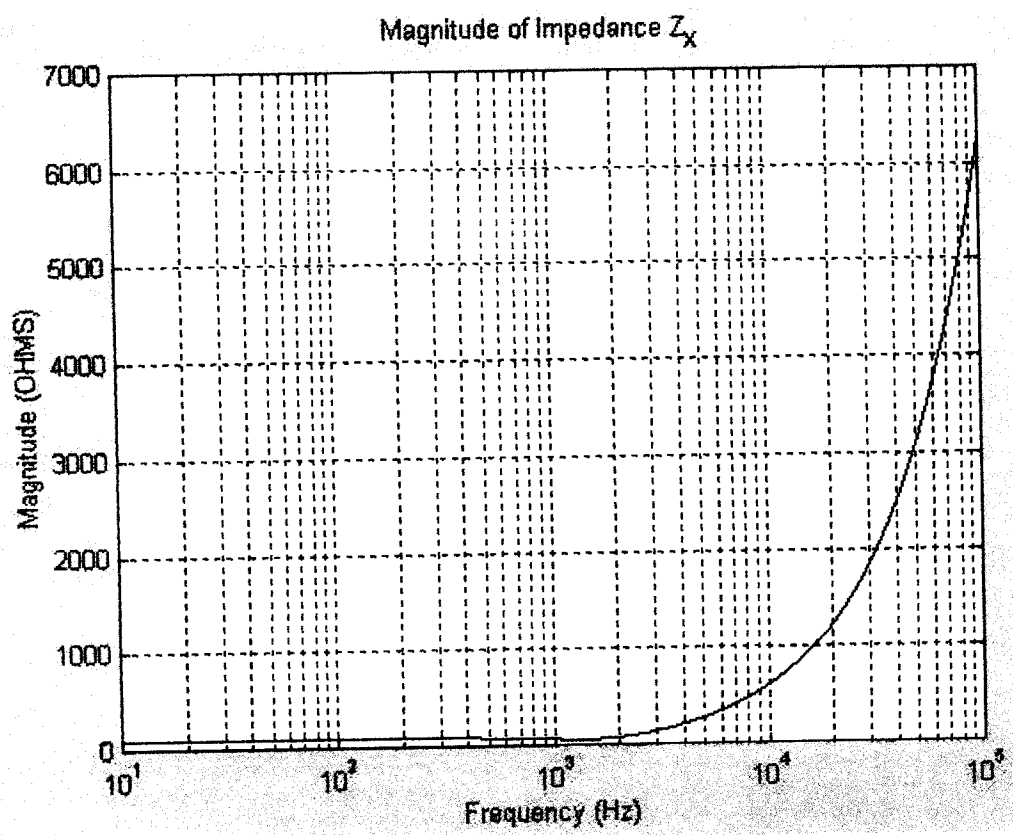
In the following circuit which of the four graphs is the correct plot of the magnitude of Z (the impedance "looking in") as a function of frequency from 10 Hz to 100 kHz?



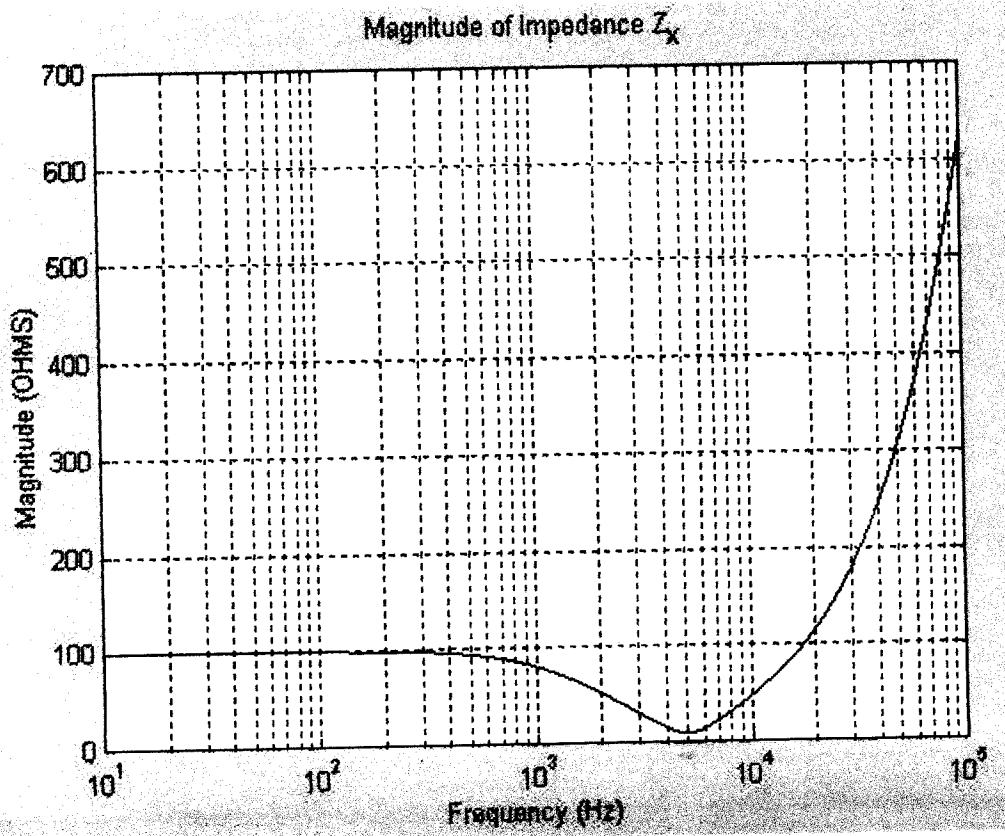
a.



b.



c.



d.

Magnitude of Impedance Z_x

