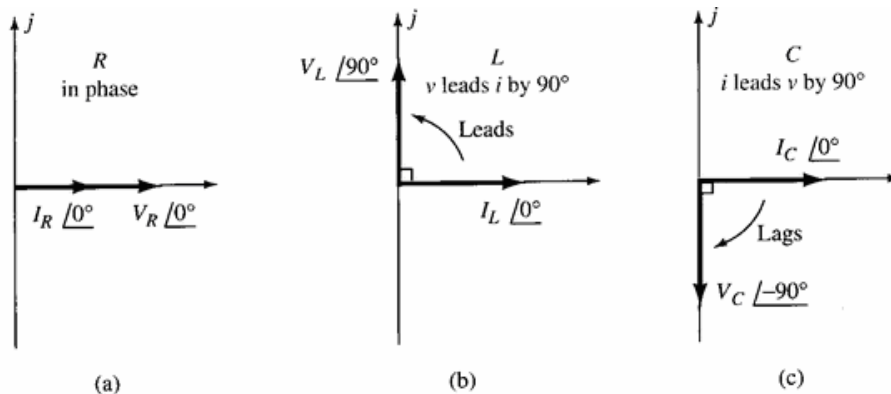


元件	電抗 (Reactance) Ω	阻抗 (Impedance) Ω Polar coordinate	阻抗 (Impedance) Ω Rectangular coordinate
R	R (Ω)	$Z_R = R \angle 0^\circ$	$Z_R = R$
L	$X_L = \omega L$ ($\frac{\text{rad}}{\text{s}} \cdot \text{H}$)	$Z_L = \omega L \angle 90^\circ = X_L \angle 90^\circ$	$Z_L = j\omega L = jX_L$
C	$X_C = \frac{1}{\omega C}$ ($\frac{1}{\text{rad/s} \cdot \text{F}}$)	$Z_C = \frac{1}{\omega C} \angle -90^\circ = X_C \angle -90^\circ$	$Z_C = -j \frac{1}{\omega C} = -jX_C$

元件	V - I relationship	相位差
	$I_R = \frac{V}{Z_R} = \frac{V/\theta}{R/0^\circ} = \frac{V}{R} \angle \theta - 0^\circ = \frac{V}{R} \angle \theta$	同步
	$I_L = \frac{V}{Z_L} = \frac{V/\theta}{X_L/90^\circ} = \frac{V}{X_L} \angle \theta - 90^\circ$	電流落後電壓 90°
	$I_C = \frac{V}{Z_C} = \frac{V/\theta}{X_C/-90^\circ} = \frac{V}{X_C} \angle \theta + 90^\circ$	電流領先電壓 90°



Lagging F_p 電路的 source current 落後 applied voltage 者；這種電路的電感性質較為強烈，或者稱為具有電感特徵 (inductive characteristics)。

Leading F_p 電路的 source current 領先 applied voltage 者；這種電路的電容性質較為強烈，或者稱為具有電容特徵 (conductive characteristics)。