

$$e^{j\phi_C} = \cos(\phi_C) + j \sin(\phi_C)$$

$$\cos(\phi_C) = \frac{1}{2}(e^{j\phi_C} + e^{-j\phi_C})$$

$$\sin(\phi_C) = \frac{1}{2j}(e^{j\phi_C} - e^{-j\phi_C})$$

$$R_C = |C| \cos(\phi_C)$$

$$I_C = |C| \sin(\phi_C)$$