

$$\left\{ \begin{array}{l} S_4 = (e + S_2) - S_3 \quad \textcircled{a} \\ S_2 = - \frac{S_1}{j\omega RC} \\ S_4 = - \frac{S_2}{j\omega RC} = - \left(- \frac{S_1}{jRC\omega} \right) \cdot \frac{1}{jRC\omega} \\ S_4 = - (S_3 + S_1) \end{array} \right.$$

$$\textcircled{a} \quad S_1 = e - \frac{S_1}{jRC\omega} - \frac{S_1}{(jRC\omega)^2}$$

$$S_1 \left(1 + \frac{1}{jRC\omega} + \frac{1}{(jRC\omega)^2} \right) = e$$

$$S_1 \left(\frac{(jRC\omega)^2 + jRC\omega + 1}{(jRC\omega)^2} \right) = e$$

$$\Rightarrow \frac{S_1}{e} = \frac{(jRC\omega)^2}{1 + jRC\omega + (jRC\omega)^2} \Rightarrow$$