

$$B_1 = \frac{j t e^{-j k \omega_3 t}}{k \omega_3} + \frac{e^{-j k \omega_3 t}}{k^2 \omega_3^2}$$

$$\begin{aligned} B_1 &= \frac{-1}{B+10} \left[\left(\frac{-1}{k^2 \omega_3^2} \right) - \left(\frac{j \left(\frac{-B-10}{c_3} \right) e^{-j k \omega_0 (-B-10)}}{k \omega_3} + \frac{e^{-j k \omega_0 (-B-10)}}{k^2 \omega_3^2} \right) \right] \\ &= \frac{-1}{B+10} \left[\frac{1}{k^2 \omega_3^2} + \frac{j (B+10) e^{j k \omega_0 (B+10)}}{k c_3 \omega_3} - \frac{e^{j k \omega_0 (B+10)}}{k^2 \omega_3^2} \right] \\ &= \frac{-1}{B+10} \left[\left(\frac{1 - e^{j k \omega_0 (B+10)}}{k^2 \omega_3^2} + j \frac{(B+10) e^{j k \omega_0 (B+10)}}{k c_3 \omega_3} \right) \right] \end{aligned}$$

$$\begin{aligned} B_2 &= \frac{2}{A+10} \left[\left(\frac{j (A+10) e^{-j k \omega_0 (A+10)}}{k c_3 \omega_3} + \frac{e^{-j k \omega_0 (A+10)}}{k^2 \omega_3^2} \right) - \left(\frac{1}{k^2 \omega_3^2} \right) \right] \\ &= \frac{2}{A+10} \left[\frac{e^{-j k \omega_0 (A+10)} - 1}{k^2 \omega_3^2} + j \frac{(A+10) e^{-j k \omega_0 (A+10)}}{k c_3 \omega_3} \right] \end{aligned}$$

$$B = \frac{c_2}{T_3} (B_1 + B_2)$$

$$V_k = B$$