$$[T] = \begin{bmatrix} 0 - \frac{1}{g_m} \\ 0 & 0 \end{bmatrix}$$

$$[T] = \begin{bmatrix} -\frac{1}{g_m r_o} - \frac{1}{g_m} \\ 0 & 0 \end{bmatrix}$$

$$[T] = \begin{bmatrix} \frac{(1/r_o) + sC_{gd}}{sC_{gd} - g_m} & \frac{1}{sC_{gd} - g_m} \\ \frac{(C_{gd}C_{gs}r_os + C_{gd}g_m r_o + C_{gs} + C_{gd})s}{sC_{gd} - g_m} & \frac{(C_{gs} + C_{gd})s}{sC_{gd} - g_m} \end{bmatrix}$$