$$G^{\text{ferm}} \begin{bmatrix} h \\ g \end{bmatrix} (\epsilon_+) = \left\langle e^{-\epsilon_+ \int (\chi_4 \chi_5 - \bar{\chi}_4 \bar{\chi}_5) \bar{\partial} X} \right\rangle_{h,g} = \frac{\theta \begin{bmatrix} 1+h \\ 1+g \end{bmatrix} (\check{\epsilon}_+ ; \tau) \theta \begin{bmatrix} 1-h \\ 1-g \end{bmatrix} (\check{\epsilon}_+ ; \tau)}{\eta^2} \; e^{\frac{\pi}{\tau_2} \check{\epsilon}_+^2}$$