

$$M = M_S \; , \qquad \omega_1 = -\lambda_S^2 \; , \qquad \alpha_1 = a_2 - 2a_3 \; ,$$

$$c_4 = |\lambda_S|^2 \; , \qquad \gamma_4 = a_2 - a_3 \; , \qquad \beta_4 = |a_2 - a_3|^2 - b_3$$