

$$F(u) = \begin{cases} \frac{\beta}{4\alpha^2} (\sqrt{4\alpha c u + b^2} - b) / |\sqrt{4\alpha c u + b^2} - b| & u \geq 0 \\ \frac{\beta}{4\alpha^2} (-\sqrt{-4\alpha c u + b^2} + b) / |-\sqrt{-4\alpha c u + b^2} + b| & u < 0 \end{cases}$$

$$b = \frac{k_e k_t}{R}$$

$$c = \frac{k_t}{R}$$

