$$2.2\frac{T_k}{a^k}(3k/2+4)^2\frac{1}{\varepsilon_3} < 2.2\frac{9}{4}\frac{(L+2)^2A\,\Gamma(k+\frac{1}{2})^{1/2}}{\varepsilon_3} < 68\frac{(L+2)^2A\,\Gamma(k+\frac{1}{2})^{1/2}}{(B_1a\sqrt{\pi})^k}$$