T-type Cat Current

Activation gate [Wang et. al. 1991, Jeong et. al. 2015]

$$\frac{dS}{dt} = \frac{S_{\infty}(v) - S}{\tau_{s}(v)}$$

$$S_{\infty} = \frac{1}{1 + \exp\left[-\left(v - V_{L/2}^{(s)}\right) / K^{(s)}\right]}$$

$$d_{s} = \frac{1}{\alpha_{d_{s}} + \exp\left[-\left(v - V_{1/2}^{(d_{s})}\right) / K^{(d_{s})}\right]}$$

$$\tau_{s} = \frac{S_{\infty}}{d_{s}}$$

Deactivation gate