

Table 1. Parameters of the simplified morphology model.

Parameter	Value	Parameter	Value
C_m	$0.75 \mu\text{F}/\text{cm}^2$	$s.\bar{g}_{K,A}$	$0.029 \text{ S}/\text{cm}^2$
R_a	$150 \Omega\text{cm}$	$s.\bar{g}_{Ca,H}$	$0.00030 \text{ S}/\text{cm}^2$
R_m	$40,000 \Omega\text{cm}^2$	$s.\bar{g}_{K,Ca}$	$0.0005 \text{ S}/\text{cm}^2$
E_{leak}	-70 mV	$d.\bar{g}_{Ca,H}$	$0.00015 \text{ S}/\text{cm}^2$
E_{Na}	$+60 \text{ mV}$	$d.\bar{g}_{K,Ca}$	$0.00025 \text{ S}/\text{cm}^2$
E_K	-80 mV	$a.\bar{g}_{Ca,H}$	$0.00045 \text{ S}/\text{cm}^2$
E_{Ca}	$+140 \text{ mV}$	$a.\bar{g}_{K,Ca}$	$0.00025 \text{ S}/\text{cm}^2$
\bar{g}_{Na}	$0.009 \text{ S}/\text{cm}^2$	$a.\bar{g}_{Ca,L}$	$0.005 \text{ S}/\text{cm}^2$
\bar{g}_K	$0.01 \text{ S}/\text{cm}^2$	$ax.\bar{g}_{Na}$	$0.6 \text{ S}/\text{cm}^2$

s-soma, d-dendrite, a-apical calcium spike initiation zone, ax-axon. For $\bar{g}_{K,A}$, only the somatic value is given. But A-type potassium channels were present in all dendritic compartments, their density linearly increased 5-fold up to $500 \mu\text{m}$ from the soma. \bar{g}_{Na} and \bar{g}_K were uniformly distributed, only in the axon, \bar{g}_{Na} had a different value.