



## Active first order lowpass in SC technique

Transfer function (ac simulation) after transformation to a time-continuous equivalent circuit (storistor concept)

**Two different SC realizations (approximations):**

- Euler-forward
- Euler-backward
- For comparison purposes: Classical RC active realization (opamp)

Bandwidth (3-dB): 1 kHz

Clock frequency: 50 kHz (see end of first transfer function period).

Max deviation due to SC approximation: approx. 6%