

Amplitude Distortion

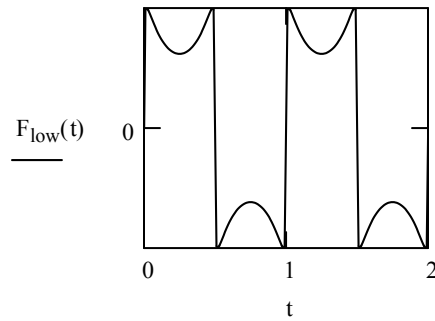
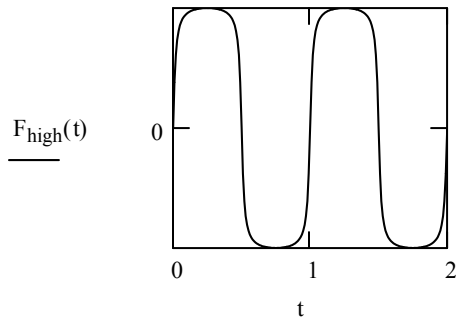
$t := 0, 0.01 \dots 2$ $n := 1 \dots 50$

$$B_n := \frac{4}{\pi \cdot (2 \cdot n - 1)} \cdot \exp[-0.1 \cdot (2 \cdot n - 1)]$$

$$C_n := \frac{4}{\pi \cdot (2 \cdot n - 1)} \cdot [1 - \exp[-(2 \cdot n - 1)]]$$

$$F_{\text{high}}(t) := \sum_n [B_n \cdot \sin[(2 \cdot n - 1) \cdot 2 \cdot \pi \cdot t]]$$

$$F_{\text{low}}(t) := \sum_n [C_n \cdot \sin[(2 \cdot n - 1) \cdot 2 \cdot \pi \cdot t]]$$



(a) high frequency components attenuated

(b) low frequency components attenuated