

### Chapter 6, Solution 6.

$$i = C \frac{dv}{dt} = 55 \times 10^{-6} \text{ times the slope of the waveform.}$$

For example, for  $0 < t < 2$ ,

$$\frac{dv}{dt} = \frac{10}{2 \times 10^{-3}}$$

$$i = C \frac{dv}{dt} = (55 \times 10^{-6}) \frac{10}{2 \times 10^{-3}} = 275 \text{ mA}$$

Thus the current  $i(t)$  is sketched below.

