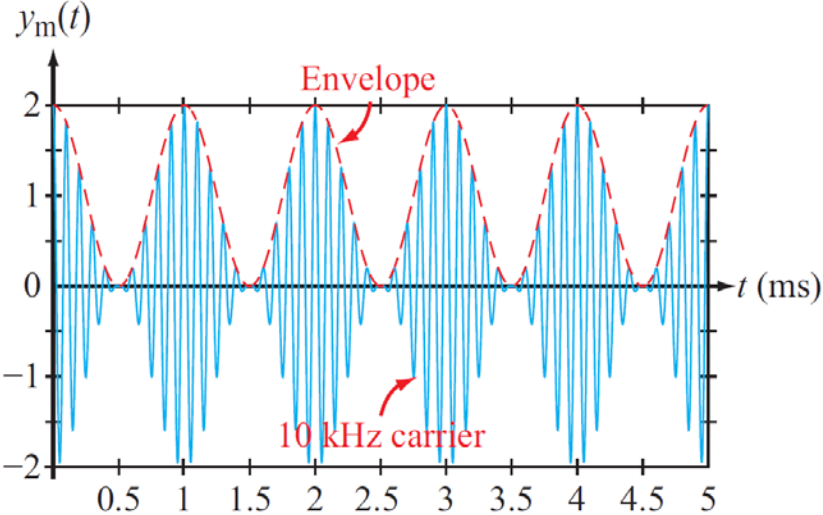


**Concept Question 6-18:** What is a carrier signal? How is it used?

A carrier is the modulating sinusoid for AM radio. Multiplying the signal to be transmitted shifts its spectrum up and down by the frequency of the carrier. Fig. 6-62 shows why it is called a “carrier”—it carries the signal to be transmitted on top of itself.



**Figure 6-62:** 1 kHz tone (sinusoid) amplitude modulating a 10 kHz carrier.