

---

*Losses due to eddy currents at a higher frequency.* If the frequency of the applied time-harmonic magnetic field in any of the two cores in Fig. Q6.11 is doubled, the new time-average power of Joule's losses in the core equals  $k$  times its previous value, where

- (A)  $k = 2$ .
- (B)  $k > 2$ .
- (C)  $k = 1/2$ .
- (D)  $k < 1/2$ .
- (E)  $k = 1$ .

*Solution:* (B)

*Answer:* (B)