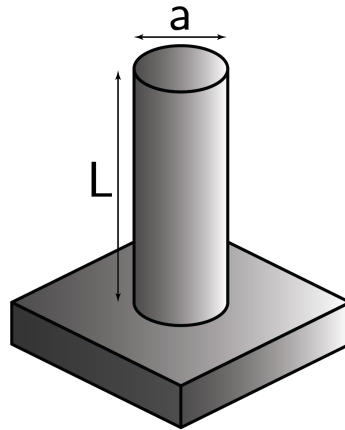


Fins - Parameter 5

Determine the fin parameter m^2 for the shown fin geometry.



Given the standard definition of the fin parameter:

$$m^2 = \frac{\alpha \cdot U}{\lambda \cdot A_c}$$

Where the circumference can be stated as follows:

$$U = \pi a$$

And the cross-sectional area:

$$A_c = \frac{1}{4} \pi a^2$$

Which gives:

$$m^2 = \frac{4\alpha}{\lambda a}$$