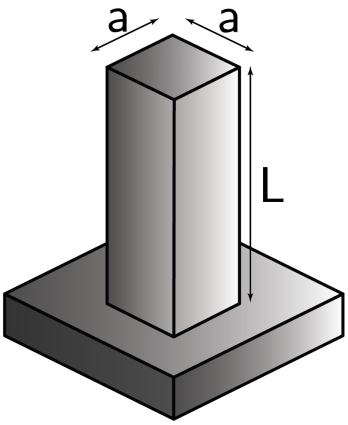
Fins - Parameter 2

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



Given the standard definition of the fin parameter:

$$m^2 = \frac{\alpha \cdot U}{\lambda \cdot A_\mathrm{c}}$$

Where the circumference can be stated as follows:

$$U = 4a$$

And the cross-sectional area:

$$A_\mathrm{c} = a \cdot a$$

Which gives:

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