$$\bar{\nu} = \frac{1}{2\pi c}\sqrt{\frac{k}{\mu}}$$

$$2\pi\bar{\nu}c = \sqrt{\frac{k}{\mu}}$$

$$(2\pi\bar{\nu}c)^2 = \frac{k}{\mu}$$

$$\mu(2\pi\bar{\nu}c)^2 = k.$$

$$4\pi^2\bar{\nu}^2c^2\mu = k.$$

μ - kg
$\bar{\nu}$ - m^{-1}
c - $m\,s^{-1}$.

Determine units of k.

Units.

$$(m^{-1})^2 \cdot (m\,s^{-1})^2\ kg = k.$$

$$m^{-2}\ m^2 s^{-2}\ kg = k.$$

$$kg\,s^{-2} = k.$$

$k \Rightarrow N\,m^{-1}$

$\downarrow$

$kg\,m\,s^{-2}$

$= kg\,m s^{-2}\,m^{-1}$