Answer on the question #57295, Physics / Optics

Question:

What is the wavelength of a wave having a frequency of 5.76 x 1012 s-1?

Answer:

The wavelength λ and frequency ν are related through the speed of light c:

$$\lambda = \frac{c}{\nu}, \lambda = \frac{3 \cdot 10^8 m\, s^{-1}}{5.76 \cdot 10^{12} s^{-1}} = 5.21 \cdot 10^{-5} m = 52.1\ \mu m.$$