Assignment
12.8 - 6

EE23BTECH11034 - Prabhat Kukunuri

QUESTION

A charged particle oscillates about its mean equi-
librium position with a frequency of $10^9 Hz$. What
is the frequency of the electromagnetic waves pro-
duced by the oscillator?

SOLUTION

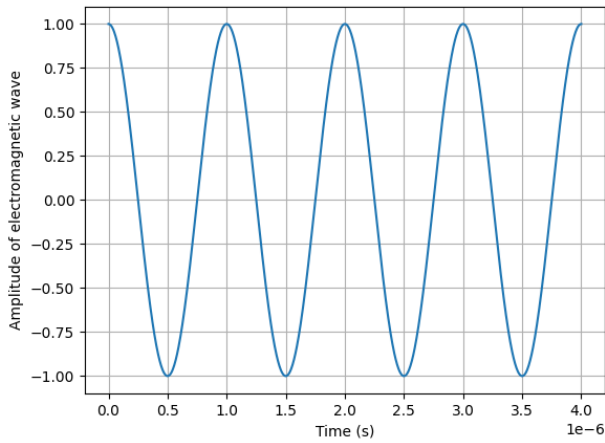| Symbol	Value	Description
y	$\cos(2f_c\pi t)$	amplitude of electromagnetic wave
f_c	10^9	frequency of electromagnetic wave
t	seconds	used to observe the nature amplitude

TABLE 0

VARIABLE DESCRIPTION

Fig. 0. graph of $y(t) = \cos\left(2 \times 10^9 \pi t\right)$