

25 Microwaves in a vacuum travel at speed X and have wavelength of order of magnitude Y .

What are the speed and a possible order of magnitude of wavelength of X-rays in a vacuum?

| | speed | wavelength |
|----------|----------|-------------|
| A | X | $10^{-8} Y$ |
| B | X | $10^{-4} Y$ |
| C | $10^4 X$ | Y |
| D | $10^8 X$ | Y |