

27 T is a microwave transmitter placed at a fixed distance from a flat reflecting surface S.



A small microwave receiver is moved steadily from T towards S and receives signals of alternate maxima and minima of intensity.

The distance between successive maxima is 15 mm.

What is the frequency of the microwaves?

- A** $1.0 \times 10^7 \text{ Hz}$
- B** $2.0 \times 10^7 \text{ Hz}$
- C** $1.0 \times 10^{10} \text{ Hz}$
- D** $2.0 \times 10^{10} \text{ Hz}$