

26 Two satellites in orbit around the Earth are at a constant distance of 100 km apart from each other.

Satellite X transmits a microwave pulse towards satellite Y. The pulse takes time T to reach Y.

Satellite Y then transmits a pulse of visible light towards satellite X.

What is the time taken for the pulse of light to reach X?

A $10^{-5} T$

B $10^{-3} T$

C $10^{-2} T$

D T