27 A generator produces a r.m.s. current of 50 A at a r.m.s. voltage of 240 V. The voltage is stepped up to 50 kV r.m.s. by an ideal transformer and transmitted through a power line with a total resistance of 100 Ω.

What is the percentage power lost in the transmission?

A 0.048% **B** 0.20% **C** 0.48% **D** 2.0%