Let $F_T(n)$ be the probability that two independent, uniformly random permutations of $[n]$ have the same order, and let $F_K(n)$ be the probability that two independent, uniformly random permutations of $[n]$ are in the same conjugacy class. It is well known that $F_K(n) \sim \frac{\Delta}{n^2}$ for a rather explicit constant $\Delta$, and it is not hard to show that $\liminf \frac{F_T(n)}{F_K(n)} > 1$. We prove here that $F_T(n) = O\left(\frac{\log \log n}{\log n}\right)$ as $n \to \infty$. (Received September 25, 2018)