

C - Diamond

Electrical properties

Basic Parameters

Breakdown field	10^6 - 10^7 V/cm
Mobility electrons	≤ 2200 cm ² V ⁻¹ s ⁻¹
Mobility holes	≤ 1800 cm ² V ⁻¹ s ⁻¹
Diffusion coefficient electrons	≤ 57 cm ² /s
Diffusion coefficient holes	≤ 46 cm ² /s
Electron thermal velocity	$\sim 10^5$ m s ⁻¹
Hole thermal velocity	$\sim 10^5$ m s ⁻¹

