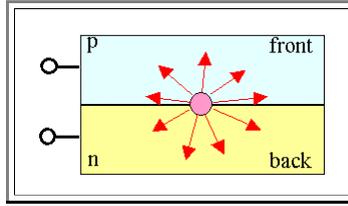


Exercise 5.2.2 Fresnel Equations and LEDs

Consider a simple light emitting diode, working as shown schematically. All the light is generated in a small volume as indicated, and we assume that the semiconductor is fully transparent (which is not really true). The index of refraction of semiconductors is rather large; you may take it to be $n = 3$



- The simple question is: How much (in %) of the light generated is transmitted through the front (upper) surface?
- Suggest measures to improve that percentage.

[Link to the solution](#)