Abstract

Description of certain effects related to the width of the intrinsic region produced in a silicon pi-n diode by lithium ion drifting. It is found that for wider intrinsic regions at large forward biases there is a larger ohmic drop across the region and a correspondingly smaller current. Moreover, the recovery time decreases with increasing intrinsic region width. Conversely, the decay phase time increases with increasing intrinsic region width and with increasing current levels.

Citation

T. L. Harman, T. A. Rabson and T. K. Gaylord, "Effects of Intrinsic Region Width in SI(Li) p-i-n Diodes," Solid State Electronics, Vol. 17, pp. 408-411, 1974.