Title (en)

TEMPERATURE COMPENSATED INTEGRATED SEMICONDUCTOR RESISTOR

Publication

EP 0000863 B1 19810715 (DE)

Application

EP 78100173 A 19780615

Priority

US 82575977 A 19770818

Abstract (en)

[origin: US4229753A] A circuit technique is disclosed for compensating for changes in the resistance of an integrated circuit resistor in an epitaxial bed, which is exposed to temperature changes. The resistance of an integrated circuit resistor is a function of the temperature at which is operates. The invention is based on the recognition that the resistance of the resistor is also a function of the potential difference between the body of the resistor and the epitaxial bed itself. Temperature compensation is achieved by connecting a temperature sensing circuit to the epitaxial bed, which has a voltage output which varies inversely with respect to the temperature coefficient of resistance of the resistor. Thus, the net change in the resistance of the resistor as it undergoes a temperature change, approximates zero.

IPC 1-7

H01L 23/56; H01L 27/08

IPC 8 full level

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