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Characterization of Thin Film Al/p-CdTe Schottky Diode

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Abstract: A study has been made on the behavior of Al/p-CdTe thin film junction grown by thermal evaporation method. I-V characteristics show that the Al makes Schottky contact with p-CdTe. The variation of junction capacitance with frequency and voltage has been studied to evaluate the barrier height. The activation energy and band gap have been estimated by studying variation of resistivity with temperature. Using all these data, band diagram of Al/p-CdTe has been proposed.

Key Words: Al, p-CdTe, Schottky, C-V, band diagram



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