

A. Kothari, P. C. Pandey, T. S. Rathore, A micro-controller based dB meter, IETE J. Research, vol. 47(3-4), pp. 165-168, 2001

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Abstract - A dB meter is used to compress the large dynamic range of a signal. A logarithmic amplifier based on the exponential $v-i$ characteristic of a p-n junction can be used for dB conversion. However, the p-n junction is too sensitive to temperature variations and, therefore requires temperature compensation. In the proposed dB meter, we used an exponential waveform which does not depend upon the device parameters. The effect of temperature variations in RC values is eliminated by using a well-regulated reference source.