

BE1M13VES

Manufacturing of Electrical Components

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Overview

1 Semiconductor Components

TOPIC

1 Semiconductor Components

Basic Properties

- Nonlinear characteristics - used for rectifying, sensing, saturation etc.
- VA characteristics are quite dependent on ambient factors - temperature, light.
- Some components are able to amplify the input signal - transistors

Equivalent Circuit

For AC circuits the parasitic serial inductance and parallel capacity must be taken into account. The frequency dependence of the resistors is caused especially by its construction.

- $H_1, H_2...$ magnetic field from resistive track and leads.
- $E...$ electric field (capacitance) between opposite sides of package and leads.