

NV6106 Semiconductor Energy Band-Gap Measurement Trainer introduces you to a very useful nonlinear electronic device: "diode". This trainer familiarizes the characteristic and the energy band gap of Germanium semiconductor diode. Semiconductor diode is an important element of most electronic devices and play an essential role in modern technology, because of its relevant conductivity. This trainer provides the crucial framework, which needed to understand the concept of an energy band gap and characteristic of a diode. Conductivity is directly related to energy bands and it is necessary for any detailed description of semiconductor devices. The trainer is based upon reverse diode characteristic, in which conductivity depends on temperature.

- ▣ **Designed with all safety standards**
- ▣ **Easy understanding circuit arrangement, with diagram interpretation**
- ▣ **Adjustable voltage Oven produces isothermal heat with regulation**
- ▣ **Onboard voltage and current measurement**

Scope of Learning

- To find the energy band gap of semiconductor material using Germanium diode
- To draw the reverse characteristic of a semiconductor material using Germanium diode



Technical Specifications

DC Power Supply

+15V, 2.5A
+5V, 0.5 A

Diode

OA79 P-N junction
Germanium Type

Switch

1 Pole, 2 Ways
Toggle Type

DPM

Type : LCD
Display : 3½ digit

Oven

Height : 77 mm
Width : 74 mm
Coil : Nichrome Wire

Thermometer : Graduated scale up to 100°C

Fuse : 0.5A

Mains : 230V ±10%, 50 Hz

Dimensions (mm) : W 250 D 130 H 30

Manufactured by :

NVIS Technologies

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