Energy Band Gap By Four Probe Method

Product Categories: Characteristics And Application, Characteristics And Application, Electronics, Engineering Equipment

Product Page: https://www.labappara.com/product/energy-band-gap-by-four-probe-method/

Product Description

Energy Band Gap By Four Probe Method

Experiment consists of the following :

Probes Arrangement : It has four individually spring loaded, coated with Zn at the tips. The probes are collinear and equally spaced. The Zn coating & individual spring ensure good electrical contacts with the sample. The probes are mounted in a bush which ensure a good electrical insulation between the probe. A spacer near the tips is also provided to keep the probes at equal distance. The whole arrangement is mounted on a suitable stand and leads are provided for current and voltage measurements.

Features :

Sample : Ge (Germanium) crystal in the form of a chip slice.

Oven : It is a small oven for the variation of temperature of the crystal from room Temperature to about 200Deg C. Operating Temperature is 180DegC

Four Probes Set-up : (Measuring Unit)-LCD Display for all Parameters

Soft Press Keys for Menu

USB Interface

Software provided for PC Interface

Direct Graph Plot & calculation of Band GapE of Energy g as per Selected Point from Graph

Technical Specification

Voltage Range :0 – 4.000V

Resolution :1mV at 4V range

Accuracy :± 0.1 % of reading ± 1 digit

Current range :0 – 20 mA

Resolution :10 µA

Accuracy :± 0.25 % of the reading ± 1 digit.

Memory capacity :8 KB

Logging :up to 256 readings storage

PC interface :USB

Selection keys :Keypad

Display :16x2 Alphanumeric LCD

Oven with Temperature Range : 0 – 200 ºC (with 1 ºC resolution)

Software :EasyLogPro v545

Requirements:

USB Drivers

USB Cable

PC / Laptop :Window Based (Only 32 Bit operating System Support)