Email : sales@scilabexport.com
Phone: +91-7082934803

Product Name :

Semiconductor Diodes (for high school)

Product Code :

SCL226/035



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Description :

Semiconductor Diodes (for high school) (Product Code: SCL226/035) are rectifier diodes for practical lessons on one-way conduction, forward and reverse bias, and converting alternating current into direct current. Their 1000 V direct voltage rating and 5 A maximum direct current leave a wide margin for the low-voltage circuits used in school laboratories. These components are supplied by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, Ambala, a laboratory equipment supplier in India, for use in any semiconductor diode kit for physics practicals.

Specifications

Parameter	Detail
Type	Semiconductor rectifier diode
Direct voltage rating	1000 V
Maximum direct current	5 A
Intended level	High school physics and electronics practicals

Typical Use

The first experiment is usually the simplest: place a diode in series with a small lamp and a cell, then reverse it. The lamp lights one way round and stays dark the other, which makes the idea of forward and reverse bias concrete. With a variable supply, a resistor and two meters, students then record current against voltage and plot the characteristic curve, noting the sharp rise once the forward threshold is passed.

Senior classes use the same diodes to build a half-wave rectifier from a low-voltage AC source, then combine four of them into a bridge for full-wave rectification, a standard rectifier circuit kit exercise. Always include a series resistor to limit current, check the band that usually marks the cathode before connecting, and never feed the circuits directly from the mains.

Supplier

Jain Scientific Equipments Private Limited, known to customers as ScienceLab, operates from Ambala, Haryana and supplies electronic components like these diodes alongside its own physics apparatus, so a school can source a complete practical from one place. Visit the company profile to learn more.

Related Lab Equipment

Useful items for diode and rectifier practicals:

- Light-Emitting Diode (LED) — a diode that shows forward bias by lighting up.
- Zener Diode — for comparing ordinary diode behaviour with reverse breakdown.
- Zener Diode Experiment Circuit Board — a ready board for characteristic-curve experiments.
- Multimeter — reads current and voltage when plotting the diode curve.

Explo