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

Product Name :

Transistor (for high school)

Product Code :

SCL234/037



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Description :

Transistor (for high school) (Product Code: SCL234/037) is an NPN bipolar transistor used to show how a small base current controls a much larger collector current in school electronics and physics practicals. Rated for a maximum allowable collector current of 1 A, it suits switching circuits with LEDs or small lamps as well as the curves plotted with a transistor characteristics kit. It is manufactured by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, Ambala, India.

Specifications

Parameter	Detail
Type	Bipolar transistor, NPN
Maximum allowable collector current	1 A
Maximum allowable voltage	300 V (as listed for the collector and emitter)
Maximum junction temperature	Confirmed on enquiry
Product code	SCL234/037
Manufacturer	Jain Scientific Equipments Pvt Ltd (ScienceLab), Ambala, India

What Is the High School Transistor Used For?

A good starting circuit uses the transistor as a switch: an LED or small lamp sits in the collector circuit, and a resistor feeds the base from a second, weaker path. Touching the base connection on and off turns the load on and off, showing that a tiny control current can govern a larger one. Adding a light dependent resistor to the base divider turns this into an automatic night light, a popular project for class 11 and 12 students.

For quantitative work, students hold the collector-emitter voltage steady, vary the base current and record the collector current, then repeat at other voltages to draw the output characteristics used in common emitter amplifier experiments. Identify the emitter, base and collector leads from the part marking before wiring, always include a base resistor, and keep currents well below the 1 A limit.

Manufacturer

Jain Scientific Equipments Private Limited, which trades as ScienceLab from Ambala, Haryana, manufactures this transistor for schools and colleges together with the LEDs, resistors and meters used in the same practicals. For vendor registration, the manufacturer is Jain Scientific Equipments Private Limited (CIN U29309HR2020PTC087597, GSTIN 06AAECJ8618A1ZT). More details are on our company profile.

Related Lab Equipment

These items are typically used in the same transistor practicals:

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