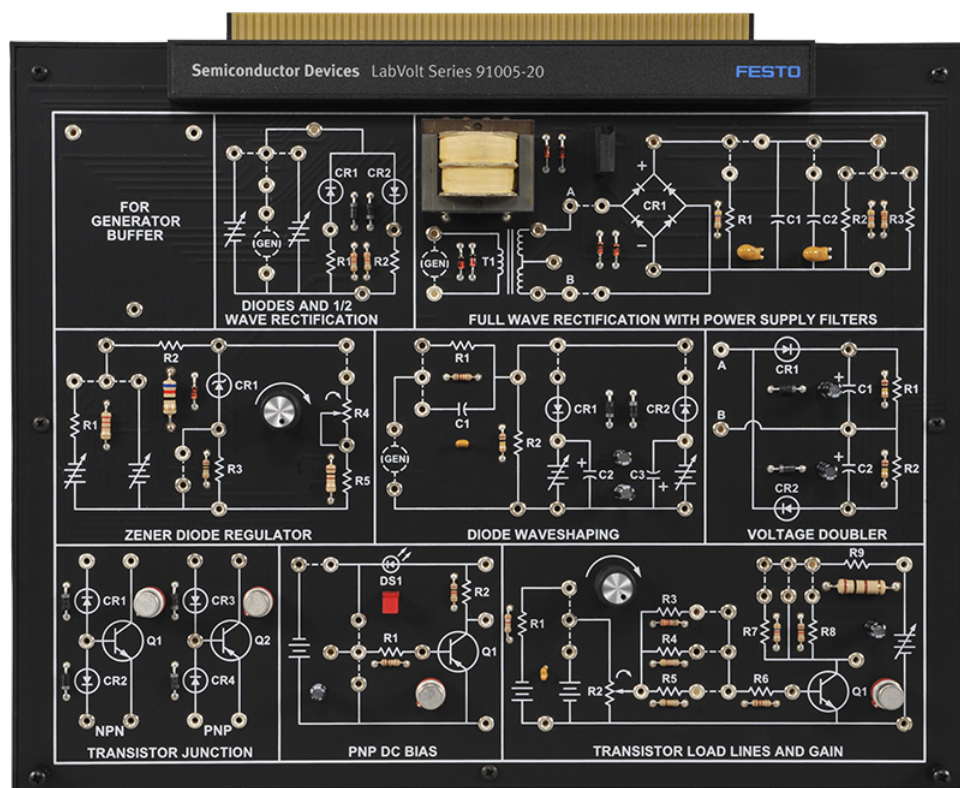


Semiconductor Devices FACET Board 580925 (91005-20)

FESTO

LabVolt Series

Datasheet



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General Description

The Semiconductor Devices training module contains nine circuit blocks pertaining to skills training in semiconductor circuits. After completion of the FACET programs in AC and DC Fundamentals and AC and DC Circuits and Analysis, students are ready to train on the semiconductor module.

Students in this program will be responsible for analyzing and troubleshooting the following circuits:

- Diodes and Half-wave Rectification
- Full-wave Rectification with Power Supply Filters
- Zener Diode Regulator
- Diode Waveshaping
- Voltage Doubler
- Transistor Junction
- PNP DC Bias
- Transistor Load Lines and Gain

Topic Coverage

- Semiconductor Component Identification and Control of a Semiconductor Switch
- Diode: DC Characteristics, Diode Waveshaping
- Rectifiers: Half-Wave, Full-Wave Diode Bridge, Power Supply Filtering, Voltage Doubler
- Zener Diode and Voltage Regulation
- Transistor: Testing the Junctions, PNP Transistor Current Control Circuit, Emitter-Base Bias Potentials, Collector Current vs Base Bias, DC Circuit Voltages, Load Lines
- Troubleshooting Basics and Troubleshooting the Semiconductor Devices Circuit Board

Reflecting the commitment of Festo Didactic to high quality standards in product, design, development, production, installation, and service, our manufacturing and distribution facility has received the ISO 9001 certification.

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Festo Didactic SE

Rechbergstrasse 3
73770 Denkendorf
Germany

P. +49(0)711/3467-0
F. +49(0)711/347-54-88500

Festo Didactic Inc.

607 Industrial Way West
Eatontown, NJ 07724
United States

P. +1-732-938-2000
F. +1-732-774-8573

Festo Didactic Ltée/Ltd

675 rue du Carbone
Québec QC G2N 2K7
Canada

P. +1-418-849-1000
F. +1-418-849-1666

www.labvolt.com

www.festo-didactic.com