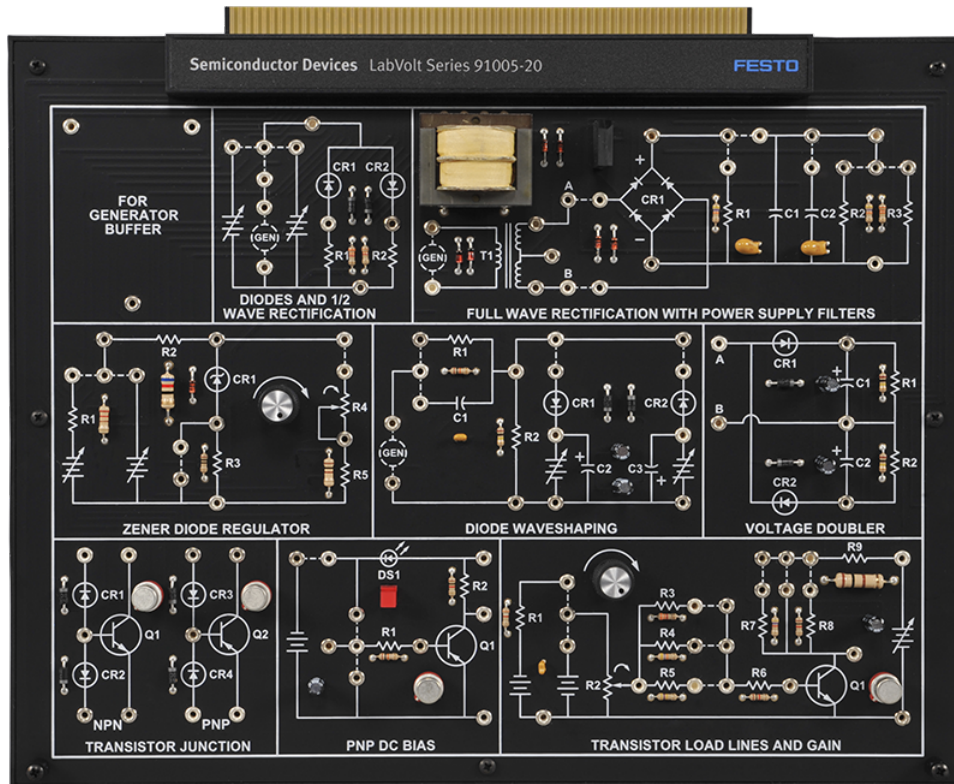


Semiconductor Devices FACET Board 580925 (91005-20)



LabVolt Series

Datasheet



* The product images shown in this document are for illustration purposes; actual products may vary. Please refer to the Specifications section of each product/item for all details. Festo Didactic reserves the right to change product images and specifications at any time without notice.

Festo Didactic
en
11/2024

Table of Contents

General Description	3
Topic Coverage	3

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.

Festo Didactic reserves the right to make product improvements at any time and without notice and is not responsible for typographical errors. Festo Didactic recognizes all product names used herein as trademarks or registered trademarks of their respective holders. © Festo Didactic Inc. 2024. All rights reserved.

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