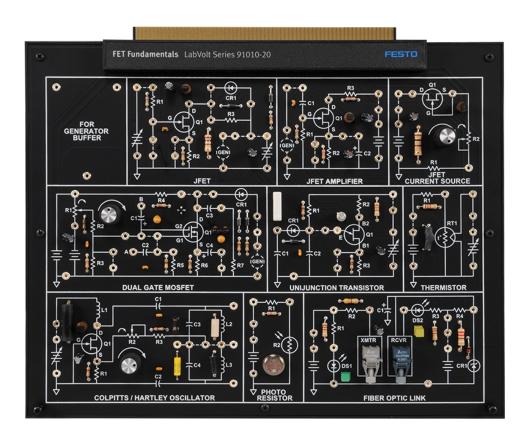
# FET Fundamentals FACET Board 580985 (91010-20)



LabVolt Series

Datasheet



<sup>\*</sup> 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.

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### **General Description**

The FET Fundamentals module contains nine circuit blocks which enable students to perform practical exercises that demonstrate principles of JFET, MOSFET, and UJT:

- JFET
- JFET Amplifier
- JFET Current Source
- Dual Gate MOSFET
- Unijunction Transistor
- Thermistor
- Colpitts/Hartley Oscillator
- Photo Resistor
- Fiber Optic Link

## **Topic Coverage**

- Component Location and Identification
- Oscillators Operation: Unijunction, Hartley, Colpitts
- JFET: Operating Characteristics, Effect of Gate Bias on Pinch-Off, Dynamic Characteristics, DC Amplifier Operation, Voltage Gain, DC Current Source Operation and Power/Load Voltage Variation
- MOSFET: Zero Bias Characteristic, Modes of Operation, Voltage Amplifier, Dual Gate MOSFET Mixer
- UJT: Operating Characteristics, Waveform Generation
- Thermistor and Photoresistor Operation
- Fiber Optic Light Transfer
- Troubleshooting Basics and Troubleshooting FET Circuits
- Understanding Specification Sheets: FET, Unijunction Transistor, Transducer

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