# **Electronics Lab Training Modules**



# **Amplifier**

# ME 613 - FET Common Source Amplifier

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#### Objective:

 FET Common Source Amplifier has been designed to study the Voltage Gain, Input Impedance, Output Impedance & Frequency Response of a Common Source FET Amplifier.



# **Technical Specifications:**

### Inbuilt Fixed DC Regulated Power Supply

Output Voltages : 15VDC

#### **Components Provided**

• **FET** :BFW 10

Biasing Resistances

Capacitors

- High quality Aluminum used as front panel of 270 mm x 170mm & mounted on light weight shock proof plastic cabinet
- Symbol diagram printed on Aluminum Front Panel & all important test Points Are brought out on front panel

• Power requirement: 230 VAC 10%, 50Hz.

• Weight : 1.0Kg Approx.

Dimensions (mm) : 300(L) x 175(B) x 75(H)

#### Standard Accessories:

Power chord, Patch chords & Instruction manual.

# **Optional Accessories:**

- Dual Trace Cathode Ray Oscilloscope 20MHz (ME 3020)
- AF Function Generator (ME 250)

# ME 614 - Common Collector (Emitter Follower) Transistor Amplifier

#### Objective:

- Emitter Follower/ Common Collector Amplifier has been designed to study the Following
  - A. Output Voltage Gain.
  - B. Input Impedance.
  - C. Input Power.
  - D. Output Impedance.
  - E. Output Power.

### **Technical Specifications:**

# Inbuilt Fixed DC Regulated Power Supply

Output Voltages : 12VDC

# Transistor, Potentiometer & Components Provided

Transistor : CL-100 (NPN)

Potentiometer : 1 Nos.

Biasing Resistances

- Capacitors
- High quality Aluminum used as front panel of 270 mm x 170mm & mounted on light weight shock proof plastic cabinet
- Symbol diagram printed on Aluminum Front Panel & all important test Points Are brought out on front panel

• Power requirement: 230 VAC 10%, 50Hz.

Weight : 1.0Kg Approx.

• Dimensions (mm) : 300(L) x 175(B) x 75(H)

#### Standard Accessories:

· Power chord, Patch chords & Instruction manual.

### Optional Accessories:

- Dual Trace Cathode Ray Oscilloscope 20MHz (ME 3020)
- AF Function Generator (ME 250)

# ME 617 - Common Base Transistor Amplifier

### Objective:

- Common Base Transistor Amplifier apparatus with and without Negative Feed Back has been designed to study the following:-
  - A. Frequency Response / Output Voltage Gain.
  - B. Input Impedance.
  - C. Output Impedance.
  - D. Effect of Negative Feed Back on Output Gain.



# **Technical Specifications:**

# Inbuilt Fixed DC Regulated Power Supply

Output Voltages :-12VDC

# Transistor, Potentiometer & Components Provided

Transistor : CK-100 (PNP)

• Potentiometer : 1 Nos.

· Biasing Resistances

· Capacitors

• SPDT Switch : 1 Nos

- High quality Aluminum used as front panel of 270 mm x 170mm & mounted on light weight shock proof plastic cabinet
- Symbol diagram printed on Aluminum Front Panel & all important test Points Are brought out on front panel

• Power requirement: 230 VAC 10%, 50Hz.

• Weight : 1.0Kg Approx.

Dimensions (mm) : 300(L) x 175(B) x 75(H)

### Standard Accessories:

Power chord, Patch chords & Instruction manual.

#### Optional Accessories:

Dual Trace Cathode Ray Oscilloscope 20MHz (ME 3020)