Electrotechnics

### Draw the transistors electrical symbol, in-output characteristics, write the transistor equations, and explain the nomenclatures!

### Draw the MOSFET’s and JFET’s electrical symbols, in-output characteristics, write the equations, and explain the nomenclatures.

### Explain the types of power amplifiers.

### Explain the types of operation amplifiers.

### Exercise: Calculate the circuit’s Active, Reactive and Complex Power and the Power Factor. Draw the Voltage and Current time functions in coordination system.

### U(t)=17 sin(314t+22°)V



### What types of basic circuits in Figure and how much the circuit total gain value?

### R1=100Ω, R2=10kΩ, R3=100Ω, R4=200Ω, R5=1kΩ, R6=50kΩ, R7=1kΩ, R8=200Ω, R9=15kΩ, U1=U2

A1……………….type Op Amp

A2………………. type Op Amp

A3………………. type Op Amp