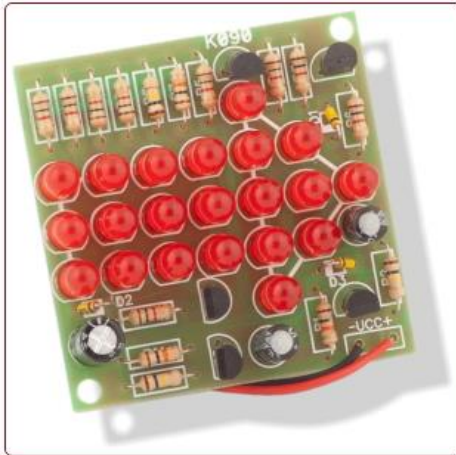


Applied Electronics /Activity №3/ Worksheet

Practical task: Making a LED directional pointer.



The device can be used to indicate the direction by 21 LEDs located in a form of a pointer. The LEDs are divided into two groups one of which is a rectangle for the tail of the pointer, and the other is a triangle which is the start of the pointer. This lighting effect creates a very good visibility of the pointer (to attract the attention) and is an ideal one for indicating the direction.

VOCABULARY

English	French	Italian	Bulgarian
resistor	resistance	resistore	резистор
diode	diode	diodo	диод
transistor	transistor	transistor	транзистор
LED	DEL/LED	LED	светодиод
Capacitor	condensateur	condensatore	кондензатор
PCB	Circuit imprimé	Circuito stampato	печатна платка
Solder	soudure	saldare	запоявам
Soldering iron	Fer a souder	saldatore	пояльник
tin	etain	stagno	калай
long nose plier	longue	pince-nezpinzalunga	клещи-човки
wire	cutterpince	coupantepince di taglio	клещи резачки
solder paste	pâte à braser	pasta saldante	паста за запояване

Sequence in making the electronic device:

1. Resistors

- Identify and remove resistors from the other components.
- Bend the ends of the resistors' wires at a right angle /i.e. vertically/.
- Find the values of the resistors.
- Arrange the resistors on the PCB.
- Solder the ends of the resistors' wires to the PCB.

2. Diodes

- Identify and remove diodes from the other components.
- Bend the ends of the diodes' wires at a right angle /i.e. vertically/.
- Find the values of the diodes.
- Arrange the diodes on the PCB.
- Solder the ends of the diodes' wires to the PCB.

3. Transistors

- Identify and remove transistors from the other components.
- Arrange the transistors on the PCB.
- Solder the transistors.

4. LED

- Remove the LEDs.
- Arrange the LEDs on the PCB.
- Solder the LEDs.

5. Capacitor

- Put the capacitor on the PCB according to the required direction.
- Solder the capacitor.

6. Solder the ends of the power cable.

7. Test the device if it works properly.

The teacher in charge:.....

/Iliyana Yakova/