

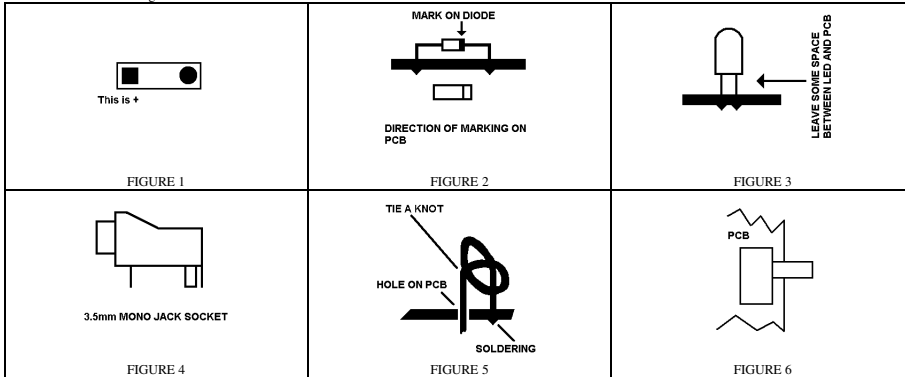
# COLORFUL FLASHING STAR

PRODUCT CODE: M00270026

DESCRIPTION: This is a very simple circuit with big fun. The LED from L1 to L20 would flash in colorful and random manner.

**READ BEFORE INSTALLATION:**

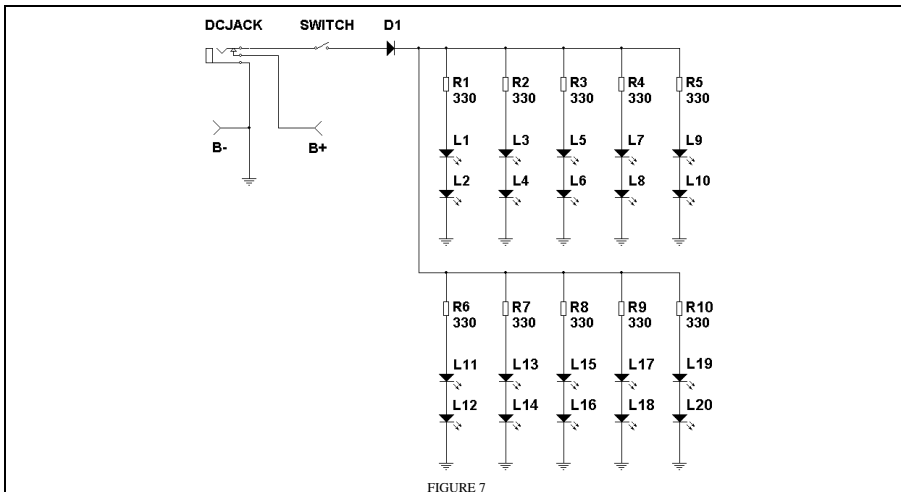
- Put the component on the side of screen printing and solder on the back of PCB without printing.
- Placing direction of component.
- 1. On component, longer leg is "+".
- 2. On PCB marking, square pad as Figure 1 is always "+".
- 3. For diode, please install as Figure 2.
- Do not put the LED to very bottom, just install as Figure 3.
- For 9V Battery Adaptor, Red is B+ and Black is B-. Also, please tie a knot after the red and black wire has passed the neighbors hole before soldering. This is similar to Figure 5.



**CIRCUIT EXPLANATION:**

- Please read the below together with the circuit diagram in Figure 7.
- The function of D1 is to prevent reverse power supply.
  - The function of R1 is to prevent too much current to flow into the L1 and L2. Too much the current would damage the LED. R2 to R10 contain similar function.
  - The LED flash because there is IC inside each of LED.

**CIRCUIT DIAGRAM:**



**INSTALLATION:**

Just install the component to the PCB M00260044 according to below table.

ITEM	SYMBOL ON PCB	DESCRIPTION	OUTLOOK	DIRECTION IS IMPORTANT?
1	R1	RESISTOR, 330 ohms	ORANGE, ORANGE BROWN	NO
2	R2	RESISTOR, 330 ohms	ORANGE, ORANGE BROWN	NO
3	R3	RESISTOR, 330 ohms	ORANGE, ORANGE BROWN	NO
4	R4	RESISTOR, 330 ohms	ORANGE, ORANGE BROWN	NO
5	R5	RESISTOR, 330 ohms	ORANGE, ORANGE BROWN	NO
6	R6	RESISTOR, 330 ohms	ORANGE, ORANGE BROWN	NO
7	R7	RESISTOR, 330 ohms	ORANGE, ORANGE BROWN	NO
8	R8	RESISTOR, 330 ohms	ORANGE, ORANGE BROWN	NO
9	R9	RESISTOR, 330 ohms	ORANGE, ORANGE BROWN	NO
10	R10	RESISTOR, 330 ohms	ORANGE, ORANGE BROWN	NO
11	D1	DIODE, IN4001	FIGURE 2	FIGURE 2
12	L1	LED	ONE LONG LEG AND ONE SHORT LEG	YES
13	L2	LED	ONE LONG LEG AND ONE SHORT LEG	YES
14	L3	LED	ONE LONG LEG AND ONE SHORT LEG	YES
15	L4	LED	ONE LONG LEG AND ONE SHORT LEG	YES
16	L5	LED	ONE LONG LEG AND ONE SHORT LEG	YES
17	L6	LED	ONE LONG LEG AND ONE SHORT LEG	YES
18	L7	LED	ONE LONG LEG AND ONE SHORT LEG	YES
19	L8	LED	ONE LONG LEG AND ONE SHORT LEG	YES
20	L9	LED	ONE LONG LEG AND ONE SHORT LEG	YES
21	L10	LED	ONE LONG LEG AND ONE SHORT LEG	YES
22	L11	LED	ONE LONG LEG AND ONE SHORT LEG	YES
23	L12	LED	ONE LONG LEG AND ONE SHORT LEG	YES
24	L13	LED	ONE LONG LEG AND ONE SHORT LEG	YES
25	L14	LED	ONE LONG LEG AND ONE SHORT LEG	YES
26	L15	LED	ONE LONG LEG AND ONE SHORT LEG	YES
27	L16	LED	ONE LONG LEG AND ONE SHORT LEG	YES
28	L17	LED	ONE LONG LEG AND ONE SHORT LEG	YES
29	L18	LED	ONE LONG LEG AND ONE SHORT LEG	YES
30	L19	LED	ONE LONG LEG AND ONE SHORT LEG	YES
31	L20	LED	ONE LONG LEG AND ONE SHORT LEG	YES
32	SWITCH	SLIDE SWITCH	6 LEGS	FIGURE 6
33	DCJACK	3.5mm MONO JACK SOCKET	FIGURE 4	YES
34	B+, B-	9V BATTERY ADAPTOR	RED WIRE, BLACK WIRE	YES

- After installation, you can use external DC adaptor as power sources. You can use our product M00270013 or other similar adaptor.