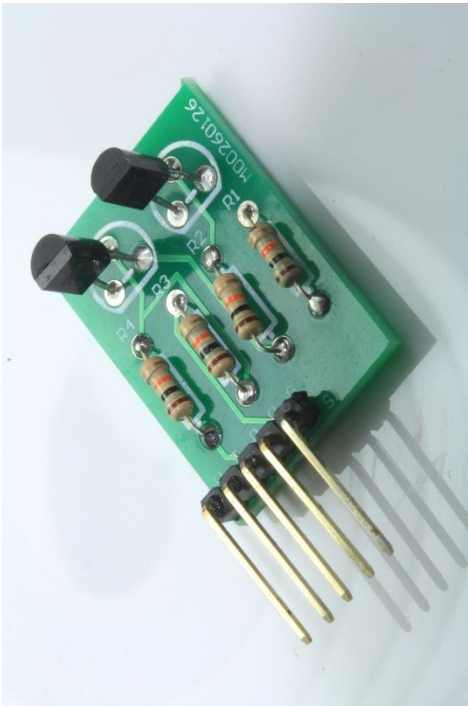


TRANSISTOR LATCH CIRCUIT

PRODUCT CODE: M00270078

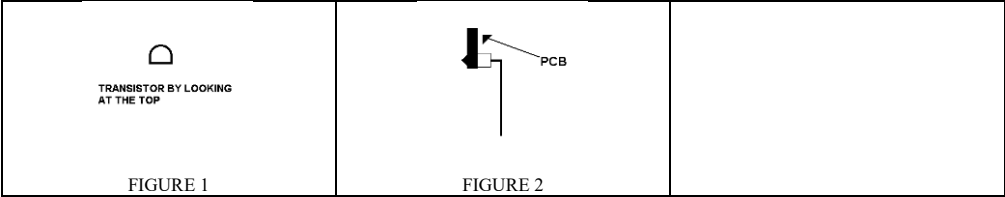
FEATURE:

- This is a useful latch circuit just by using transistor and resistor.
- Extra component such as NPN transistor, PNP transistor, resistor and capacitor is provided for the player to build up their wanted circuit.
- Assembly is needed.



READ BEFORE INSTALLATION:

- Put the component on the side of screen printing and solder on the back of PCB without printing.



COMPONENT LIST:

ITEM	AMOUNT TO BE PROVIDED	DESCRIPTION	OUTLOOK
1 to 5	5	TRANSISTOR, 9015, PNP	FIGURE 1
6 to 10	5	TRANSISTOR, 9014, NPN	FIGURE 1
11 to 20	10	RESISTOR, 10K ohms	BROWN, BLACK, ORANGE
21 to 25	5	RESISTOR, 100K ohms	BROWN, BLACK, YELLOW
26	1	BREAK AWAY MALE HEADERS	5 PINS
27	1	PRINTED CIRCUIT BROAD	/
28 to 29	2	CAPACITOR, 22*10E4 pF	MARK WITH 224 OR SAME MEANING OF VALUE

INSTALLATION:

Just install the component to the PCB M00260126 according to below table.

ITEM	SYMBOL ON PCB	DESCRIPTION	OUTLOOK	DIRECTION ON INSTALLATION? AND OTHER
1	R1	RESISTOR, 10K ohms	BROWN, BLACK, ORANGE	NO
2	R2	RESISTOR, 10K ohms	BROWN, BLACK, ORANGE	NO
3	R3	RESISTOR, 10K ohms	BROWN, BLACK, ORANGE	NO
4	R4	RESISTOR, 10K ohms	BROWN, BLACK, ORANGE	NO
5	Q1	TRANSISTOR, 9015, PNP	FIGURE 1	YES
6	Q2	TRANSISTOR, 9014, NPN	FIGURE 1	YES
7	S1	BREAK AWAY MALE HEADERS	5 PINS	FIGURE 2

HOW TO PLAY?

I make a simple circuit for you as reference. Connect “V” to 5V and “G” to G. Connect the components as left-hand side of FIGURE 4. Touch “T” to “V”. Then the latch circuit is locked and the Led would be at “ON” status even now you let “T” do not touch “V”. If you want the circuit becoming unlock, just touch “R” to “G”.

CIRCUIT DESCRIPTION:

From “HOW TO PLAY”, the circuit is locked because the current would flow as arrow of right-hand side of FIGURE 4. You could understand as “Q1” and “Q2” protecting each other to be at “ON” status.

Current could not flow as arrow when you touch “R” to “G”. The lock is released. Or you could understand as “Q2” could not protect “Q1” first. The relation of “Q1” and Q2” is collapsed.

CIRCUIT DIAGRAM:

