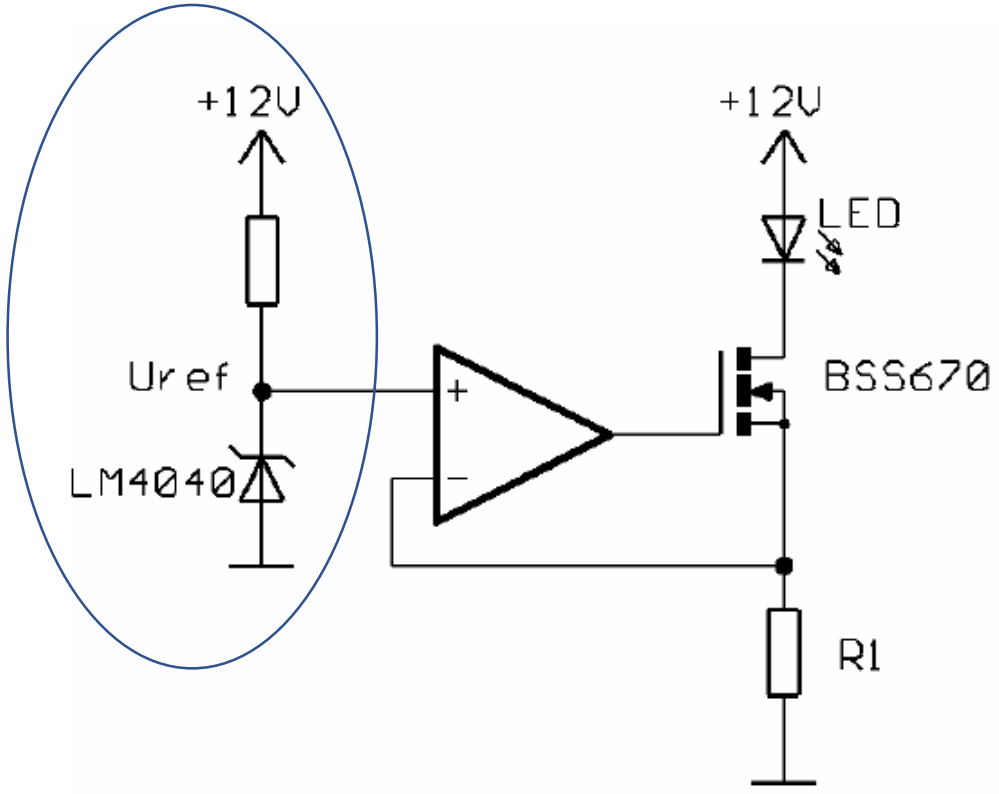
constant current circuit

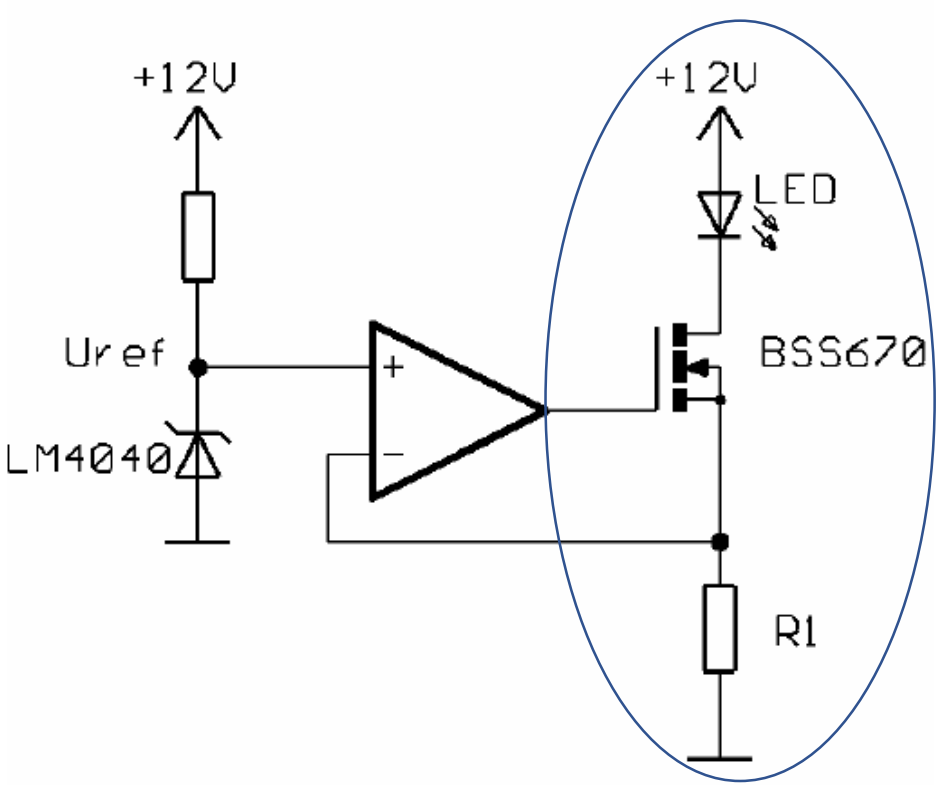
Diagram of circuit(Left side)



Circuit diagram of the constant current source

- Left side make constant voltage.
- The constant voltage would sent to R1.
- Uref would be determined by LM4040(Zener Diode) = 4.096V.
- Uref/R1 is the current to led.

Diagram of circuit(Right side)



Circuit diagram of the constant current source

- Right side would adjust the current.
- BSS670 is a MOS-FET.
- BSS670 would control max current(=54mA)
- A Steady current of LED is 50mA which received from opamp.
- A Voltage to LED would adjusted by BSS670 which make voltage drop.

Power Supply

- The Right side would need at least 9 Voltage.
- The function generator can give up to 5 voltage.
- I'll try to connect function generator to DC power which would give a 5 Voltage.
- If I set maximum voltage, the circuit would received 0~10V.

Plan

- Soldering after buying a PCB Board and each leg which make connect between PCB Board and part.
- Making a Temperature regulator and monitor circuit.
- Making a box to complete.
- Estimate by using MPPC and PMT.

Schedule

MON	TUE	WED	THU	FRI	SAT	SUN
	3/28	3/29	3/30	3/31	4/01	4/02
	Soldering current circuit and Complementing. Checking each part which I bought.			Entrusting to make current circuit and box.		
4/03	4/04	4/05	4/06	4/07	4/08	4/09
		Soldering Temperature circuit and monitor circuit and Entrusting to make Temperature circuit.				
4/10	4/11	4/12	4/13	4/14	4/15	4/16
Assembling all parts		Testing by MPPC and PMT and Calibrating.				
4/17	4/18	4/19				
Complementing and Finishing		KPS				

Back Up

Each Spec sheet

- LED
- LM4040
- BSS670
- AD8000

- If you want to see, Click that file.