

Ambient Light Sensor IC Series

Analog Current Output Type Ambient Light Sensor IC

BH1682FVC

General Description

BH1682FVC is an analog current output type ambient light sensor IC. The output is proportion to logarithm of illuminance. It has wide illuminance detection range and is suitable for the application of display brightness control.

Features

- Built-in log scale current AMP
- Built-in Ircut filter
- Built-in shutdown function
- Correspond to 1.8V logic interface

Applications

Mobile Phone, LCD TV, Note PC, Portable Game Machine, Digital Camera, LCD Display, etc.

Key Specifications

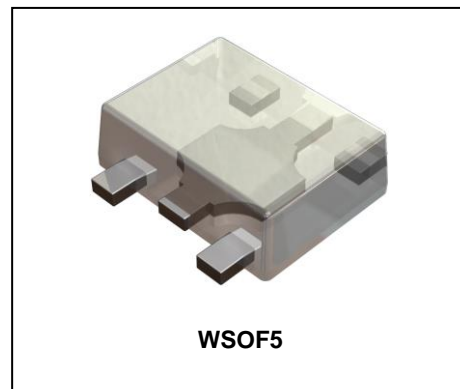
- VCC Voltage Range: 2.3V to 5.5V
- Detection Range: 55klx (Typ)
- IOU Output Current at 100lx: 20μA (Typ)
- Shutdown Current: 0.1μA (Typ)
- Operating Temperature Range: -40°C to +85°C

Package

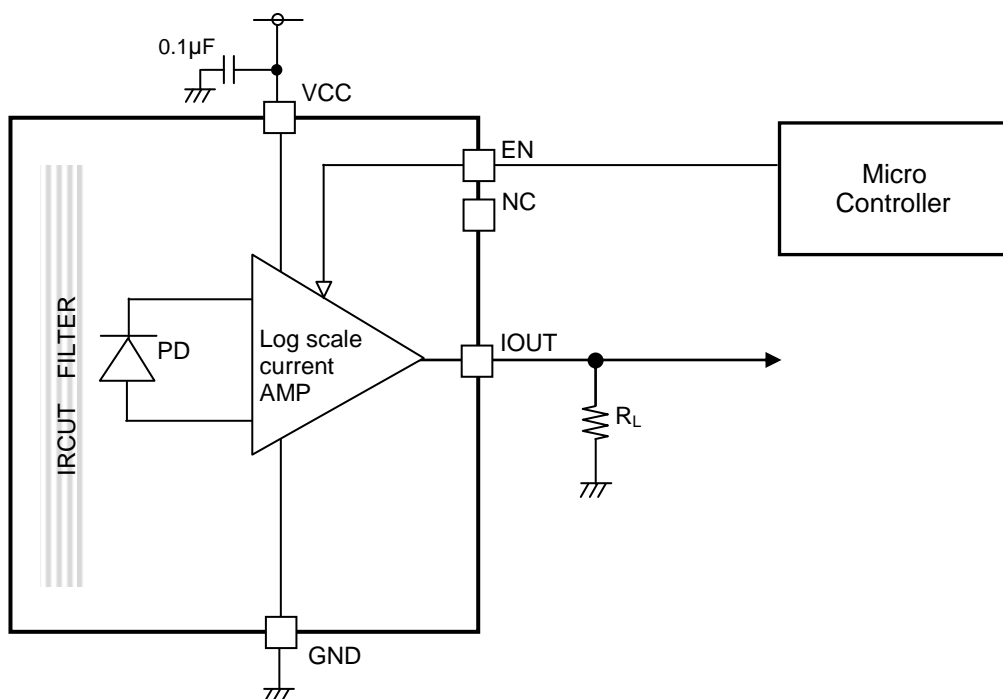
WSOF5

W(Typ) x D(Typ) x H(Max)

1.60mm x 1.60mm x 0.60mm



Typical Application Circuits



○Product structure : Silicon monolithic integrated circuit.

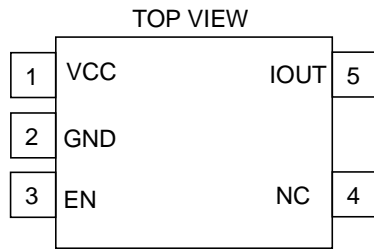
○This product does not include laser transmitter.

○This product includes Photo detector, (Photo Diode) inside of it.

○This product has no designed protection against radioactive rays.

○This product does not include optical load.

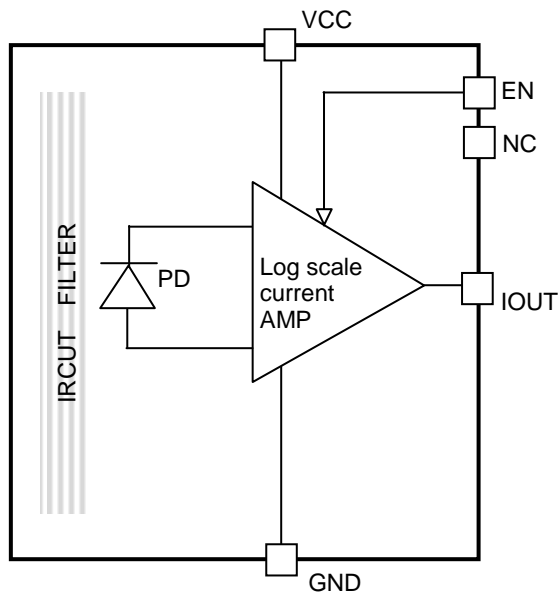
Pin Configuration



Pin Description

Pin No.	Pin Name	Function
1	VCC	Power supply
2	GND	Ground
3	EN	Mode select H: Operating mode, L: Shutdown mode
4	NC	Non connect
5	IOUT	Current output pin It outputs current which depends on illuminance.

Block Diagram



Description of Blocks

- PD
Photodiode
- Log scale current AMP
Current amplifier. It amplifies PD current and perform logarithmic transform.