

## Super capacitor charging protection chip

## ■ product description

B W6101 It is a super capacitor charging protection chip, it has a built-in high Accuracy benchmarks ensure that the output accuracy reaches  $\pm 1\%$ . The built-in power tube enables After the overcharge protection, the discharge capacity reaches  $0.7A@ (VIN=2.65V)$  , It satisfies the charging characteristics of supercapacitors when cascaded.

B W6101 Can be selected as two types of super

Grade capacitor for charging protection. When the selected port is high, the corresponding protection

Point of care  $2.65V$  , When the selected port level is low, the corresponding protection point is

$2.45V$  . It is convenient for users to use flexibly.

B W6101 Using miniaturized SOT23-5 Encapsulation for high density

Degree installation. At the same time, there are fewer peripheral components, which greatly reduces application costs.

## ■ use

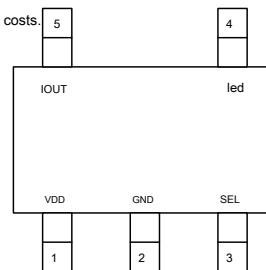
- Super capacitor protection
- Voltage detection

## ■ Features

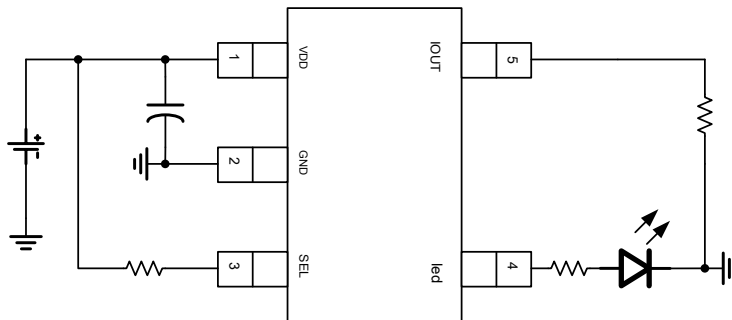
- High precision:  $\pm 1\%$
- Strong discharge capacity:  $700mA@2.65V$
- Alarm indication
- Few peripheral components
- Miniaturized package: SOT23-5L

## ■ Package

SOT23-5L



## ■ Typical application circuit

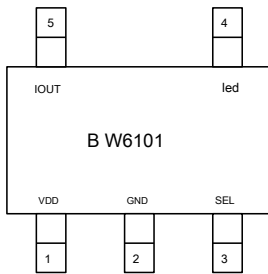


## ■ Ordering Information

B W6101 ①②

Digital project	symbol	description
①	M	SOT23-5L
②	R	Tape direction: positive
	L	Tape direction: reverse

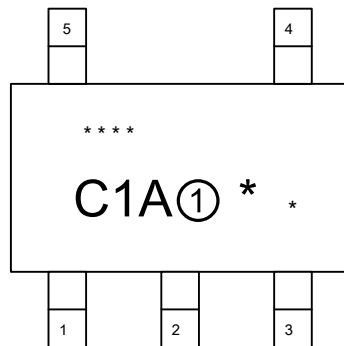
## Pin configuration



Pin number	Pin name	Function description
1	VDD	power supply
2	GND	Ground
3	SEL	Internal voltage selection port, high selection 2.65V , Low selection 2.45V
4	led	Overcharge alarm
5	IOUT	Drain port

## Print information

- SOT23-5L

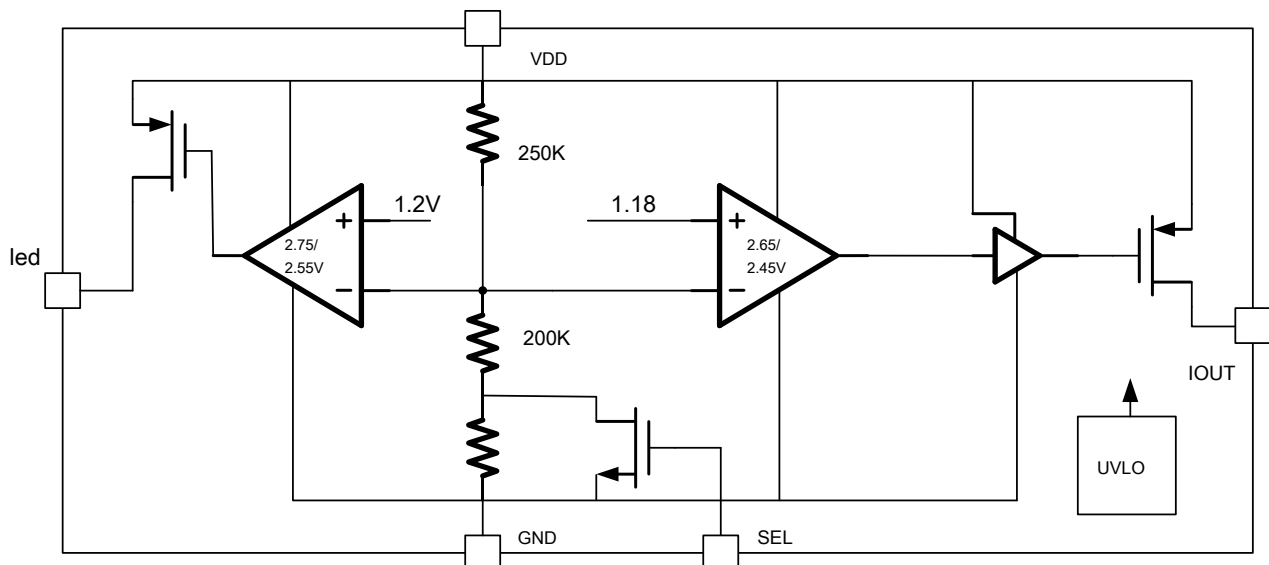


C1A: representative B W6101

①: Internally prescribed by the company's production department

6 A "" Representative quality tracking information

## Functional block diagram



### Absolute maximum rating

project	symbol	Absolute maximum rating	unit
Input voltage	Vin	6.0	V
Output current	Iout	1000	mA
led Source current	Iled	30	mA
Power consumption	Pd	350	mW
Operating temperature	Topr	-40 ~+ 85	°C
Storage temperature	Tstg	-40 ~+ 125	°C

### Electrical characteristic parameters

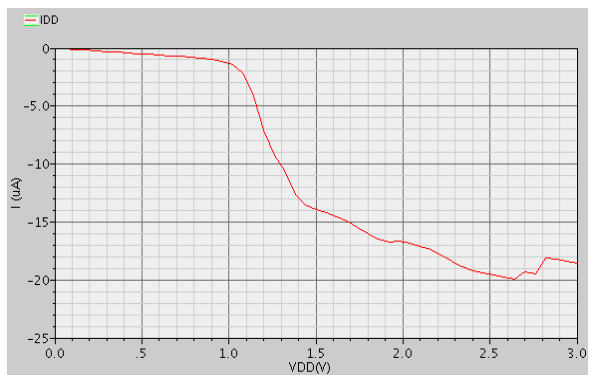
Test Conditions

(Ta=25 °C unless otherwise specified)

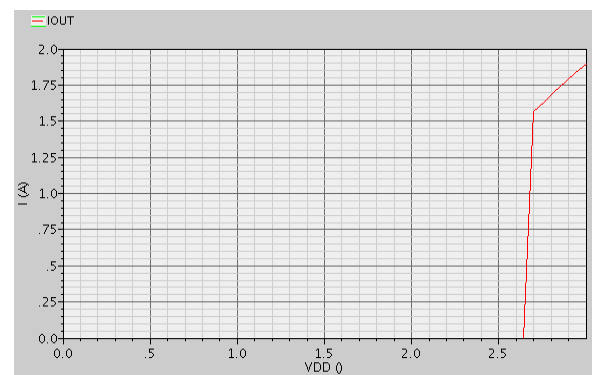
project	symbol	condition	Minimum	Typical value	Max	unit
Overcharge voltage	VDET	SEL="H"	2.62	2.65	2.68	V
		SEL="L"	2.42	2.45	2.48	
Alarm voltage	VWAR	SEL="H"	2.71	2.75	2.79	V
		SEL="L"	2.51	2.55	2.59	V
Working current	IDD	VDD=2.8V , No load		20	30	uA
Discharge current	IOUT	VDD=2.65V	700			mA
Indicating current	ILED	VDD=2.75V	5		30	mA

### Characteristic

Quiescent current VS input voltage

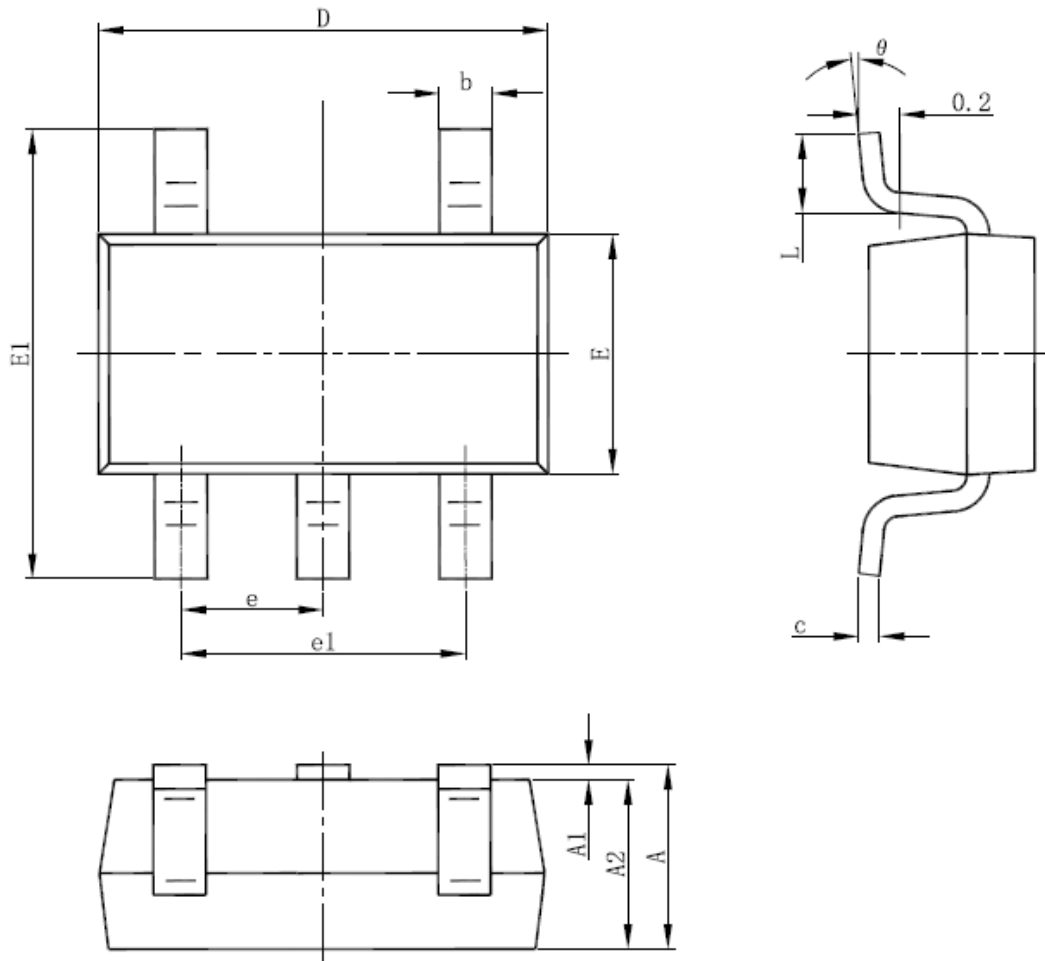


Input voltage and discharge current



■ Package information

● SOT23-5



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E	1.500	1.700	0.059	0.067
E1	2.650	2.950	0.104	0.116
e	0.950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
$\theta$	0°	8°	0°	8°