

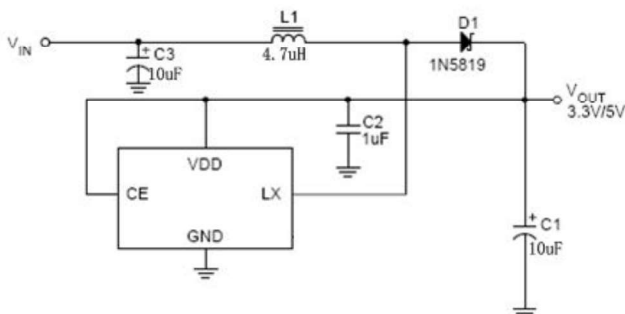
Small Package PWM Control Step-up Switching Regulator

General Description

The FH4102 is a compact, high efficiency, and low voltage step-up DC/DC converter with an Adaptive Current Mode PWM control loop, includes an error amplifier, ramp generator, comparator, switch pass element and driver in which providing a stable and high efficient operation over a wide range of load currents. It operates in stable waveforms without external compensation.

FH4102 can provide 1.1A output current when input voltage above 3.5V. Besides, the 21 μ A low quiescent current together with high efficiency maintains long battery lifetime. The output voltage is set with two external resistors. Both internal 2.5A switch and driver for driving external power devices (NMOS or NPN) are provided.

Typical Application Circuit



Circuit 1 . Typical Application for Portable Instruments

Pin Assignment

Pin Number	Pin Name	Function
SOT-23-6		
1	LX	Pin for switching
2	GND	Ground
3	VDD	Output pin
4	CE	Chip enable
5	NC	No. Connected
6	NC	No. Connected

Features

- 1MHz fixed switching frequency
- 90% efficiency
- 21 μ A quiescent (switch-off) supply current
- 0.01 μ A shutdown mode supply current
- Providing flexibility for using internal power switches
- Output voltage: settable to between 2.5V to 5.5 V, accuracy of 2%

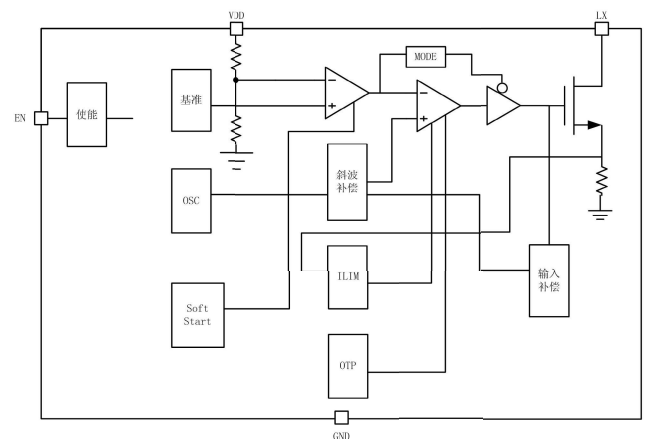
Applications

- MP3
- PDA
- DSC
- LCD panel
- RF-Tags
- Portable instrument
- Wireless equipment

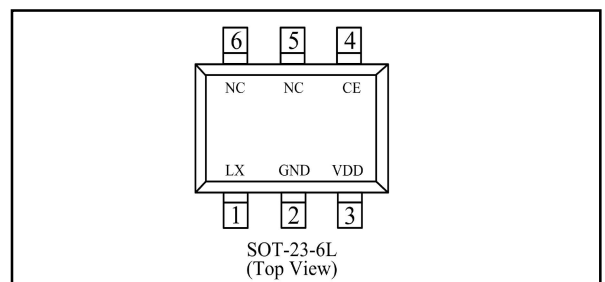
Package

- SOT-23-6L

Block Diagram

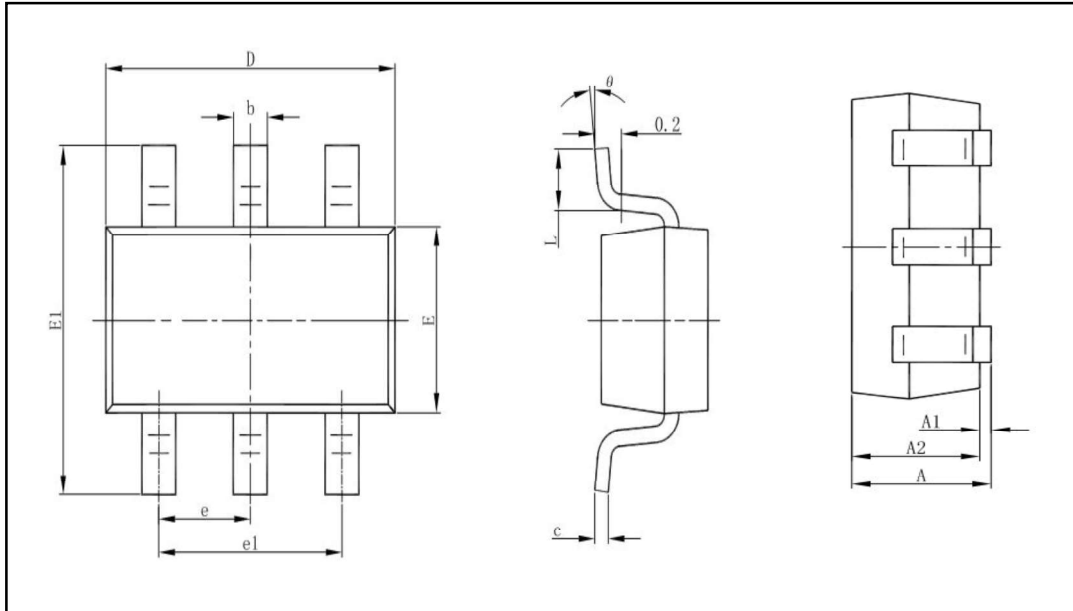


Pin Configuration



■ Package Information

- SOT-23-6L



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
θ	0°	8°	0°	8°

■ Ordering Information

FH4102 ①②③④⑤

Designator	Symbol	Description	Designator	Symbol	Description	SPQ
①	C	CE without internal pull down resistor	④⑤	M6	SOT-23-6L	3000PCS
②③	50	Voltage Output: e.g.: 5.0V	R	Embossed Tape	:Standard Feed	
			L	Embossed Tape	:Reverse Feed	