

Synchronous DC-DC Boost Converter

■ **Description**

FH4003 series is a high efficiency, low ripple, high frequency PFM control DC-DC boost converter. **FH4003** series requires only three external components, the device can change the low voltage input of battery step-up into output voltages for electronic devices.

■ **Applications**

- 1 to 3 batteries of electronic equipment
- Electronic dictionaries , digital cameras
- LED flashlights, LED Light,
- Blood pressure monitors, MP3, remote control toys,
- Wireless heads ets ,wireless mouse, keyboard
- Medical devices , anti -lost alarm,
- Car alarm, charger, VCR, PDA and other handheld electronic devices

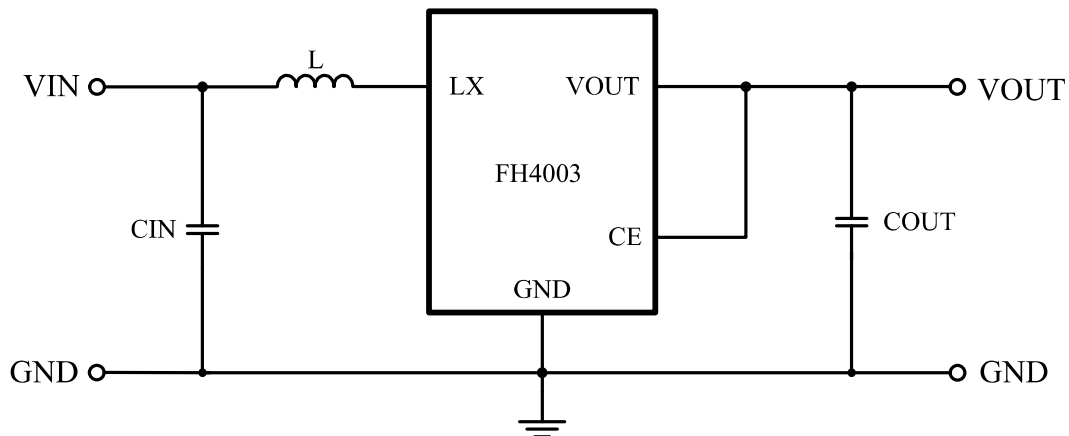
■ **Features**

- Maximum efficiency: 94%
- Maximum operating frequency: 300KHz
- Low Quiescent Current: 15uA
- Output Voltage: 1.8V ~ 5.0V (step 0.1V)
- Output Accuracy: ± 2.5%
- Input voltage: 0.9V ~6.5V
- low ripple and lownoise
- Small volume

■ **Package**

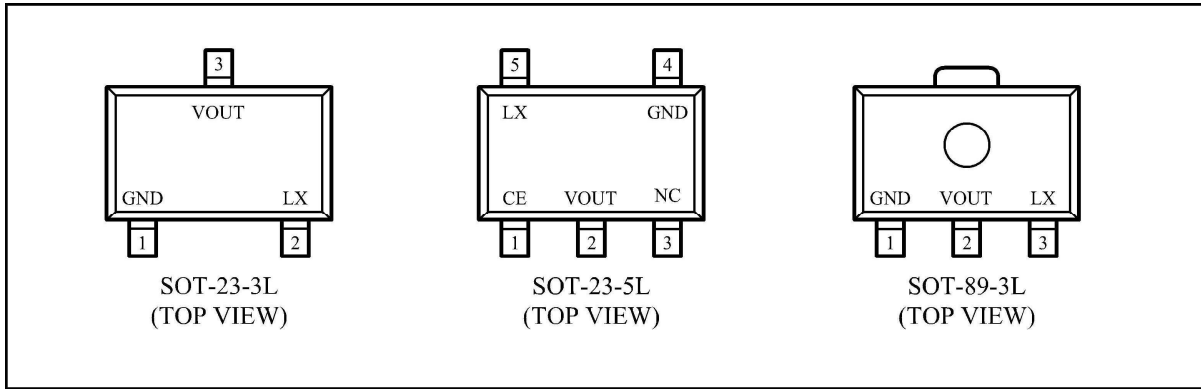
- SOT-23-3L
- SOT-23-3B
- SOT-23-5L
- SOT-89-3L

■ **Typical Application Circuit**



Note : CIN=10μF, COUT=22 μF, L=10uH.

Pin Assignment



Functional Pin Description

Pin Number			Pin Name	Function Description
SOT-23-3L	SOT-23-5L	SOT-89-3L		
2	5	3	LX	Switch pin
3	2	2	VOUT	Output pin
—	1	—	CE	Chip enable pin
1	4	1	GND	Ground
—	3	—	NC	NC

Absolute Maximum Ratings

Parameter	Symbol	Description	Typical	Unit
Input voltage	V_{max}	Maximum voltage supply for V_{OUT} and V_{LX} pin	6.5	V
Current	I_{LXmax}	Maximum current in LX pin	1000	mA
Power dissipation	P_D	SOT-23-3L maximum power dissipation	350	mW
		SOT-23-3B maximum power dissipation	250	mW
		SOT-23-5L maximum power dissipation	350	mW
		SOT89 -3L maximum power dissipation	500	mW
Temperature	$T_{min-max}$	Operating Ambient Temperature	-40—85	°C
	$T_{storage}$	Storage Temperature	-40—165	
ESD	V_{ESD}	Body static pressure values	2000	V

■ Ordering Information

FH4003 ① ②③ ④⑤

Designator	Symbol	Description
①	A / C	e.g.: A~No CE, C~CE
② ③	18-50	Output Voltage: e.g. 33= 3.3V etc.
④ ⑤	M3	Package Types: SOT-23-3L
	M0	Package Types: SOT-23-3B
	M5	Package Types: SOT-23-5L
	P3	Package Types: SOT89-3L
	R	Embossed Tape :Standard Feed
	L	Embossed Tape :Reverse Feed

- FH4003 devices are Pb-free and RoHS compliant.
- The surface prints of our semiconductor devices are subject to change during the production process and do not involve changes in electrical parameters, and we will not separately state the notice.