ForDevices

DC-DC Synchronous Buck(Step-Down) Converter

500kHz 18 0V 2 0A/3 0A

■ GENERAL DESCRIPTION

Datasheet Brierf

The FH43482 and FH43484 are fully integrated, high-efficiency 2.0A and 3.0A synchronous rectified step- down converter. The FH43482 and FH43484 operates at high efficiency over a wide output current load range.

This device offers two operation modes, PWM control and PFM Mode switching in light load condition, which allows a high efficiency over the wider range of the load.

The FH43482 and FH43484 require a minimum number of readily available standard external components and is available in SOP-8L and ESOP-8L RoHs compliant package.

■ FEATURES

- High Efficiency: Up to 93%@5.0V
- Switching Frequency: 500kHz
- Output Current FH43482: 2.0A
- Output Current FH43484: 3.0A
- No Schottky Diode Required
- Input Voltage Range: 4.5V to 18.0V
- Feedback Voltage: 0.923V
- Slope Compensated Current Mode Control for Excellent Line and Load Transient Response
- Integrated internal compensation
- Stable with Low ESR Ceramic Output Capacitors
- Over Current Protection with Hiccup-Mode
- Input overvoltage protection (OVP)
- Thermal Shutdown
- Inrush Current Limit and Soft Start
- FH4482: SOP-8L Package
- FH43484: ESOP-8L Package

■ APPLICATIONS

- Vehicle USB Power Chargers
- Distributed Power Systems
- Digital Set Top Boxes
- Flat Panel Television and Monitors
- Notebook computer
- Wireless and DSL Modems
- WiFi Router/AP

■ TYPICAL APPILCATION

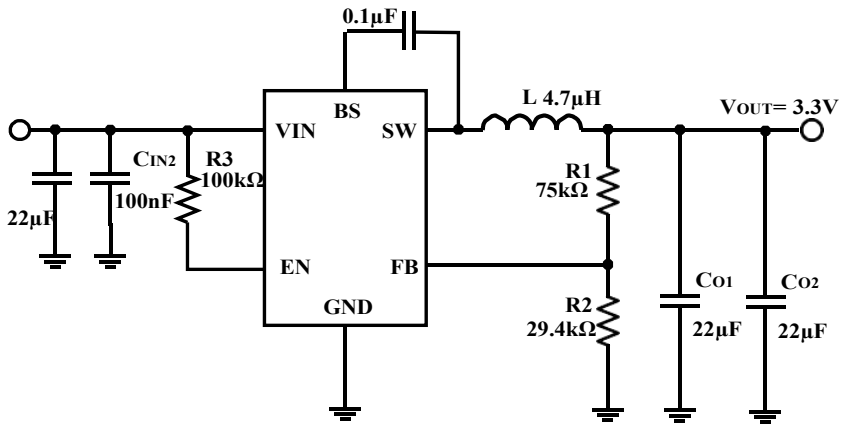
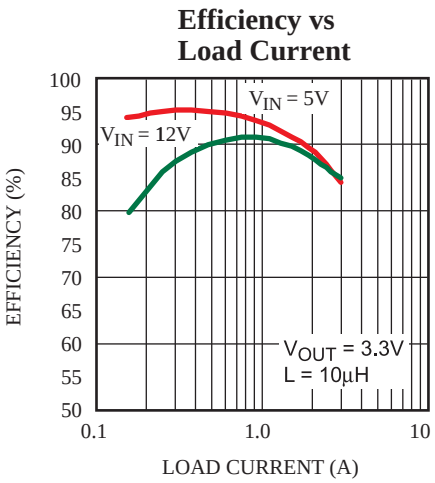
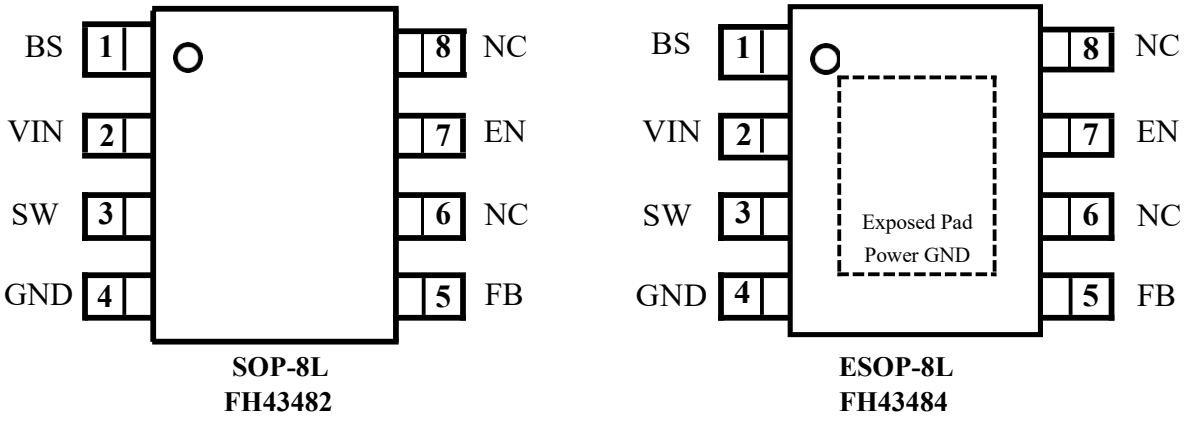


Figure 1. **Basic Application Circuit**



■ PIN NAME



SOP-8L
FH43482

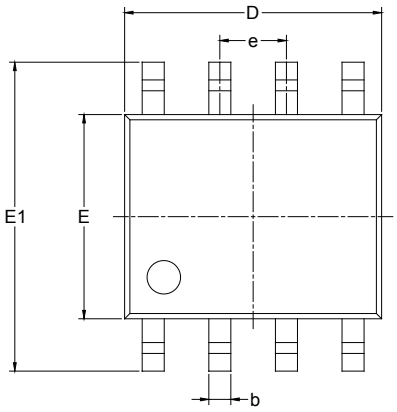
ESOP-8L
FH43484

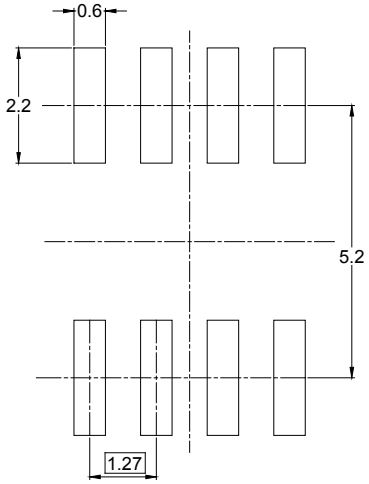
■ PIN FUNCTIONS

Pin	Name	Function
1	BS	Bootstrap. A capacitor connected between SW and BS pins is required to form a floating supply across the high-side switch driver.
2	VIN	Power supply Pin
3	SW	Switching Pin
4	GND	Ground
5	FB	Output Voltage feedback input. Connect FB to the center point of the external resistor divider.
6	NC	No Connection
7	EN	Drive this pin to a logic-high to enable the IC. Drive to a logic-low to disable the IC and enter micro-power shutdown mode. Don’t floating this pin.
8	NC	No Connection

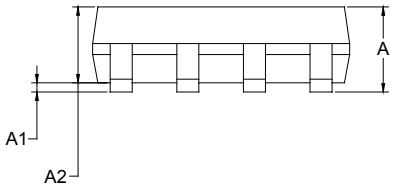
■ PACKAGE INFORMATION

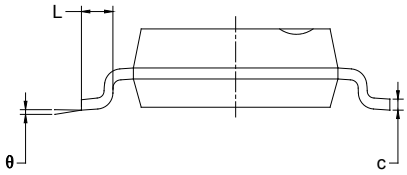
- Type: **SOP-8L**





RECOMMENDED LAND PATTERN(Unit: mm)



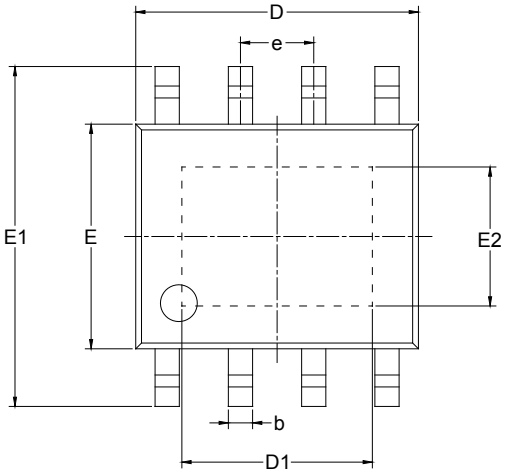


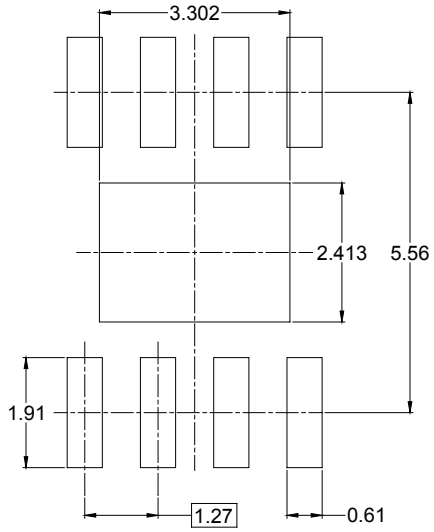
Unit: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	4.70	5.10	C	1.35	1.75
B	3.70	4.10	a	0.35	0.49
L	6.00	6.40	R	0.30	0.60
E	1.27 BSC		P	0°	7°
K	0.12	0.22	b	0.40	1.25

■ PACKAGE INFORMATION

- Type: **ESOP-8L**





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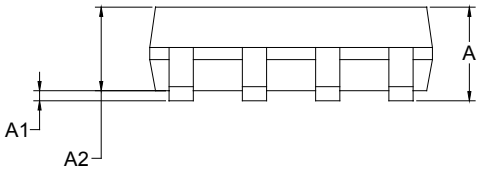

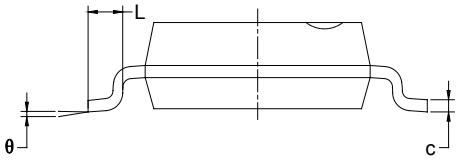

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K	0.02	0.10	b	0.40	1.25
A1	3.1	3.5	B1	2.2	2.6

■ ORDER INFORMATION

Part Number	Description	Operating Junction Temperature Range	Package	Top mark	Quantity/ Reel
FH43482S08	Vin:~18.0V Iout: 2.0A	-40 ~ +125℃	SOP-8L	*3482 (Device Code) YY XXX (Inside Code)	3000PCS
FH43484S08	Vin:~18.0V Iout: 3.0A		ESOP-8L	*3484 (Device Code) YY XXX (Inside Code)	3000PCS

Note:
1) FH43482 and FH43484 devices are Pb-free and RoHS compliant.
2) The surface imprints of our chip devices may be modified during the production process and we will not apply separately without designing changes to electrical parameters.
3) If custom production is required, please contact our local business department.

ESD SENSITIVITY CAUTION

ESD damage can range from subtle performance degradation to complete device failure. Precision integrated circuits may be more susceptible to damage because very small parametric changes could cause the device not to meet its published specifications.

Note:

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➢ Update by Dec.2019