

3-Terminal 1.2A Positive Voltage Regulator

General Description

The FH78xx series of three terminal positive regulators are available in the TO-220-3L package and with several fixed output voltages, making them useful in a wide range of applications. Each type employs internal current limiting, thermal shut down and safe operating area protection, making it essentially indestructible. If adequate heat sinking is provided, they can deliver over 1.2A output current. Although designed primarily as fixed voltage regulators, these devices can be used with external components to obtain adjustable voltages and currents.

Applications

- High Efficiency Linear Regulator
- Post Regulation for Switching Supply
- Microprocessor Power Supply
- Mother Board

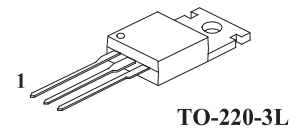
Applications Circuits

Features

- Maximum Output current I_{OM} : 1.2 A
- Output voltage: 5V/6V/8V/9V/10V/12V/15V/18V/24V
- Continuous total dissipation
 P_D : 1.5W ($T_a=25^\circ C$) 15W ($T_C=25^\circ C$)
- Thermal overload protection
- Short circuit protection
- Output transistor SOA protection
- RoHs Compliance

Package Type

- TO-220-3L



1: INPUT; 2: GND; 3: OUTPUT

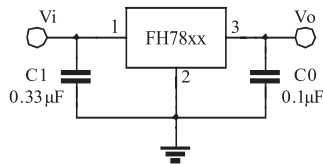


Figure.1 Fixed output regulator

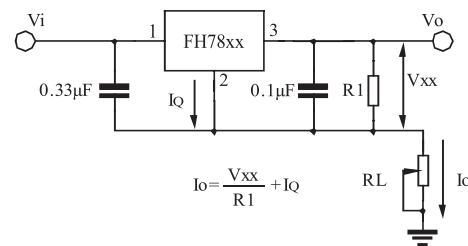


Figure.2 Constant current regulator

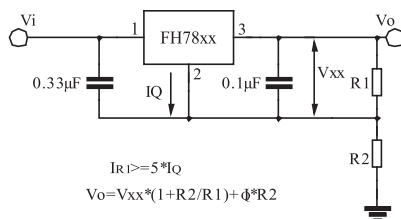


Figure.3 Circuit for increasing Regulator output voltage

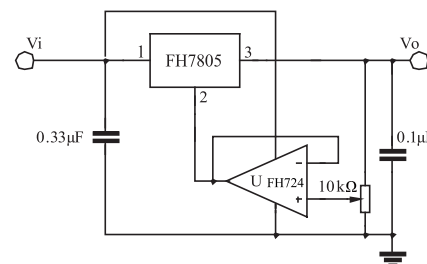


Figure.4 Adjustable output

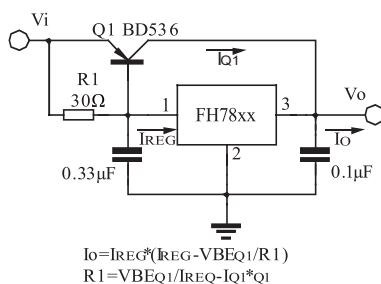


Figure.5 High current with voltage regulator

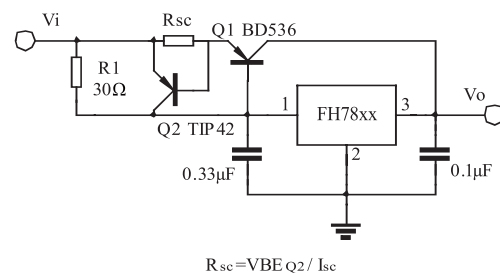


Figure.6 High output current short circuit protection

Applications Circuits (Cont.)

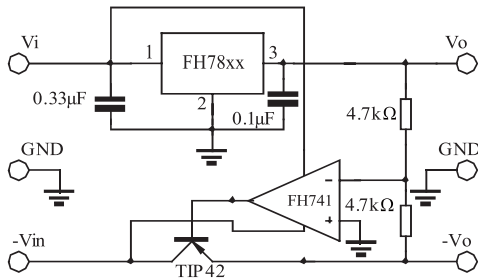


Figure.7 Tracking voltage regulator

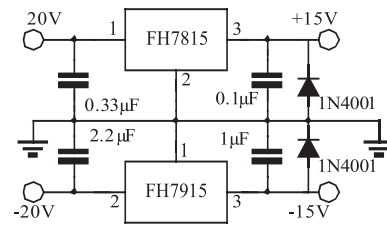


Figure.8 Split power supply(±15V,1A)

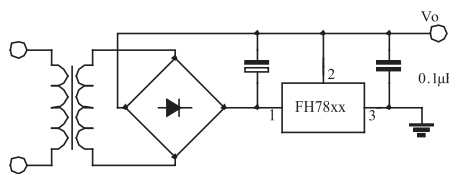


Figure.9 Negative output voltage circuit

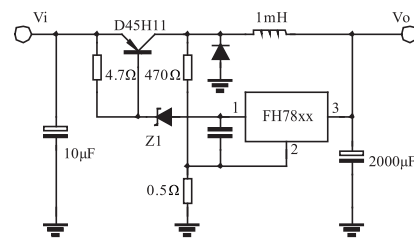


Figure.10 switching regulator

Block Diagram

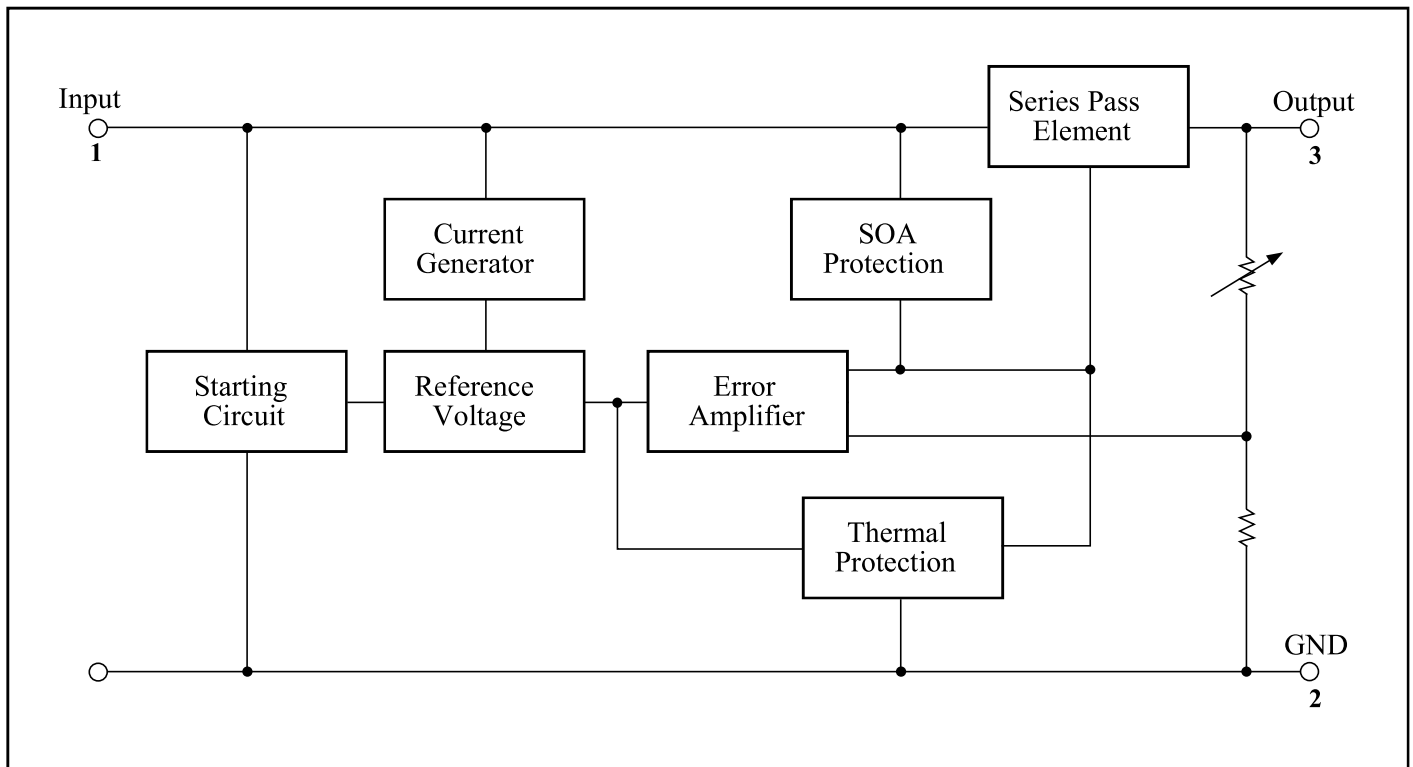


Figure 11. Block Diagram Function

ORDERING INFORMATION

Part Number	Voltage Output	Voltage Output Tolerance	Operating Temperature	Package Type	Top Mark	SPQ
FH7805T2	5.0V	±4%	0 ~ +125°C	TO-220-3L (Single Gauge)	L7805 ****	100PCS/Tape Tube 10 Tube/Carton
FH7806T2	6.0V	±4%	0 ~ +125°C		L7806 ****	
FH7808T2	8.0V	±4%	0 ~ +125°C		L7808 ****	
FH7809T2	9.0V	±4%	0 ~ +125°C		L7809 ****	
FH7810T2	10.0V	±4%	0 ~ +125°C		L7810 ****	
FH7812T2	12.0V	±4%	0 ~ +125°C		L7812 ****	
FH7815T2	15.0V	±4%	0 ~ +125°C		L7815 ****	
FH7818T2	18.0V	±4%	0 ~ +125°C		L7818 ****	
FH7824T2	24.0V	±4%	0 ~ +125°C		L7824 ****	

Note:

- FH7805/FH7806/FH7808/FH7809/FH7810/FH7812/FH7815/FH7818/FH7824 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.
- If you have any other custom purchase needs, please contact our sales department.





Timing Portfolio



SW/HW



Quality



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