

LOW DROPOUT LINEAR REGULATOR
AZ1117B
Description

The AZ1117B is a low dropout three-terminal regulator.

The AZ1117B has been optimized for low voltage where transient response and minimum input voltage are critical. It provides current limit and thermal shutdown. Its circuit includes a trimmed bandgap reference to assure output voltage accuracy to be within $\pm 1\%$. On-chip thermal shutdown provides protection against a combination of high current and ambient temperature that would create excessive junction temperature.

Features

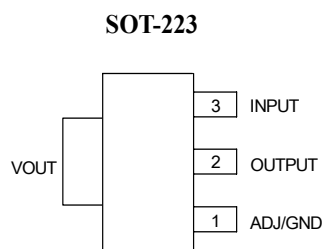
- Current Limit: 1.0A (Typ.)
- Output Noise from 10Hz to 10KHz: 0.003% of V_{OUT}
- PSRR at $I_{OUT}=300mA$ and $f=120Hz$: 70dB
- Output Voltage Accuracy: $\pm 1\%$
- On-chip Thermal Shutdown
- Maximum Quiescent Current: $I_{QMAX}=6mA$
- Operation Junction Temperature: -20 to 105°C

Applications

- USB Device
- Add-on Card
- DVD Player
- PC Motherboard

Additional Available Materials

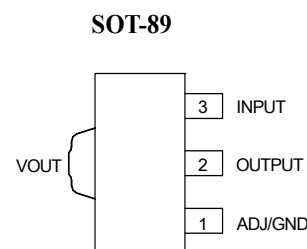
- Samples
- Data Sheet
- Reliability Report
- ESD Report

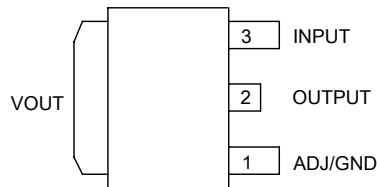
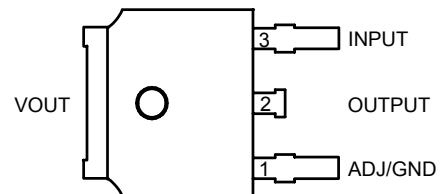
Pin Configuration

Parametric Table

I_{OUT} (Max) (A)	0.8	
Quiescent Current (Max) (mA)	6	
V_{DROP} (Typ) (V)	SOT-223	1.2
	TO-252-2(1)	1.4
	TO-252-2(3)	1.4
	SOT-223	1.2
V_{IN} (Min) (V)	3.1 (1.8V)	
V_{IN} (Max) (V)	12	
V_{OUT} (V)	1.2, 1.5, 1.8, 2.5, 3.3, 5.0, ADJ	
PSRR (dB)	70	
Accuracy (%)	± 1	
Load Regulation (Typ) (%)	0.4 (ADJ)	
Line Regulation (Typ) (%)	0.001 (ADJ)	
On/Off Pin	No	
Error Flag	No	
Operating Junction Temperature (Min) (°C)	-20	
Operating Junction Temperature (Max) (°C)	105	

Benefits

- Equivalent Characteristics to the Products from Worldwide First-class Vendors
- Very Competitive Price
- High PSRR



**LOW DROPOUT LINEAR REGULATOR****AZ1117B****Pin Configuration (Continued)****TO-252-2 (1)****TO-252-2 (3)****Ordering Information Example**

Package	Temperature Range	Part Number	Marking ID	Packing Type
SOT-223	-20 to 105°C	AZ1117BH-ADJTRE1	EH17K	Tape & Reel
		AZ1117BH-1.2TRE1	EH17P	Tape & Reel
		AZ1117BH-1.5TRE1	EH17Q	Tape & Reel
		AZ1117BH-1.8TRE1	EH17L	Tape & Reel
		AZ1117BH-2.5TRE1	EH17N	Tape & Reel
		AZ1117BH-3.3TRE1	EH17M	Tape & Reel
		AZ1117BH-5.0TRE1	EH17R	Tape & Reel

Detailed information please refer to the relevant datasheet.

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