

**1.5A LOW DROPOUT LINEAR REGULATOR****AZ1086****Description**

The AZ1086 is a series of low dropout positive voltage regulators with a maximum dropout of 1.5V at 1.5A of load current.

The series features on-chip thermal shutdown. It also includes a bandgap reference and a current limiting circuit.

The AZ1086 is available in 1.5V, 1.8V, 2.5V, 3.0V, 3.3V, and 5.0V versions. The fixed versions integrate the adjust resistors. It is also available in an adjustable version, which can set the output voltage with only two external resistors.

Features

- Current Limiting and Thermal Protection
- Output Current: 1.5A
- Current Limit: 2.3A
- Line Regulation: 0.015% (Typical)
- Load Regulation: 0.1% (Typical)

Applications

- High Efficiency Linear Regulators
- Battery Charger
- Post Regulation for Switching Supply
- Microprocessor Supply
- Motherboard Power Supply
- Cable and ADSL Modem
- DVD-Video Player
- Telecom Equipment
- Set Top Boxes and Web Boxes Modules' Supply

Benefits

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

Parametric Table

I_{OUT} (Max) (A)	1.5
Quiescent Current (Max) (mA)	10
V_{DROP} (Typ) (V)	1.3
V_{IN} (Min) (V)	2.8 (ADJ)
V_{IN} (Max) (V)	15
V_{OUT} (V)	1.5, 1.8, 2.5, 3.0, 3.3, 5.0, ADJ
PSRR (dB)	75
Accuracy (%)	± 1
Load Regulation (Typ) (%)	0.1 (ADJ)
Line Regulation (Typ) (%)	0.015 (ADJ)
On/Off Pin	No
Error Flag	No
Operating Junction Temperature (Min) (°C)	0
Operating Junction Temperature (Max) (°C)	125

Additional Available Materials

- Samples
- Data Sheet
- Reliability Report
- ESD Report

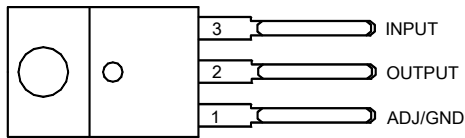


1.5A LOW DROPOUT LINEAR REGULATOR

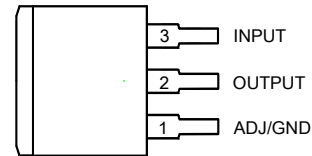
AZ1086

Pin Configuration

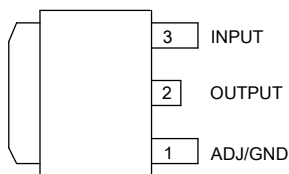
TO-220-3



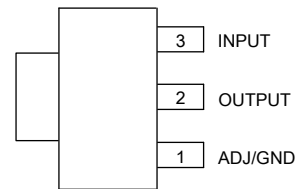
TO-263-3



TO-252-2 (1)



SOT-223



Ordering Information Example

Package	Temperature Range	Part Number		Marking ID		Packing Type
		Lead Free	Green	Lead Free	Green	
TO-220-3	0 to 125°C	AZ1086T-ADJE1	AZ1086T-ADJG1	AZ1086T-ADJE1	AZ1086T-ADJG1	Tube
		AZ1086T-1.5E1	AZ1086T-1.5G1	AZ1086T-1.5E1	AZ1086T-1.5G1	Tube
		AZ1086T-1.8E1	AZ1086T-1.8G1	AZ1086T-1.8E1	AZ1086T-1.8G1	Tube
		AZ1086T-2.5E1	AZ1086T-2.5G1	AZ1086T-2.5E1	AZ1086T-2.5G1	Tube
		AZ1086T-3.0E1	AZ1086T-3.0G1	AZ1086T-3.0E1	AZ1086T-3.0G1	Tube
		AZ1086T-3.3E1	AZ1086T-3.3G1	AZ1086T-3.3E1	AZ1086T-3.3G1	Tube
		AZ1086T-5.0E1	AZ1086T-5.0G1	AZ1086T-5.0E1	AZ1086T-5.0G1	Tube

Detailed information please refer to the relevant datasheet.

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