

**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 and 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, 3V, 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 Limit and Thermal Protection
- Output Current: 1.5 A
- Current Limit: 2.3 A
- Line Regulation: 1 mV (Typical) at 3.3V Output Voltage
- Load Regulation: 7 mV (Typical) at 3.3V Output Voltage

**Applications**

- High Efficiency Linear Regulators
- Battery Charger
- Post Regulation for Switching Supplies
- Microprocessor Supply
- Mother Board Power Supplies
- Telecom Equipment

**Benefits**

- Equivalent characteristics to the products from worldwide first-class vendors
- Very competitive price

**Parametric Table**

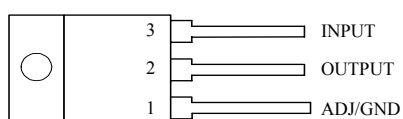
$I_{OUT}$ (Max) (A)	1.5
Quiescent Current (Max) (mA)	10
$V_{DO}$ (Typ) (V)	1.3
$V_{IN}$ (Min) (V)	2.8 (ADJ)
$V_{IN}$ (Max) (V)	15
$V_{OUT}$ (V)	1.5, 1.8, 2.5, 3.0, 3.3, 5.0
PSRR (dB)	75
Accuracy (%)	$\pm 1$
Load Regulation (Typ) (mV)	7 (3.3)
Line Regulation (Typ) (mV)	1 (3.3)
On/Off Pin	No
Error Flag	No
Operating Junction Temperature (Min) ( $^{\circ}$ C)	0
Operating Junction Temperature (Max) ( $^{\circ}$ C)	+125

**Additional Available Materials**

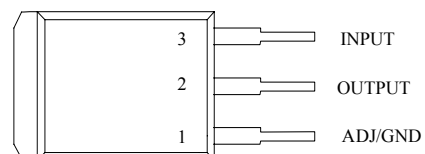
- Samples
- Datasheet
- Reliability Report
- ESD Report

**Pin Configuration**

TO-220

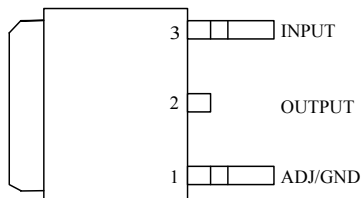


TO-263-3L

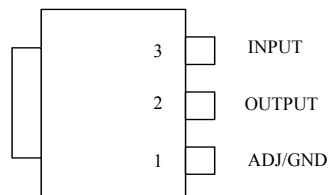


**1.5A LOW DROPOUT LINEAR REGULATOR****AZ1086**

TO-252



SOT-223

**Ordering Information Example**

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

Detailed information please refer to the relevant datasheet.

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