

**3A LOW DROPOUT LINEAR REGULATOR****AZ1085****Description**

The AZ1085 is a series of low dropout positive voltage regulators with a maximum dropout of 1.5V at 3A of load current.

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

The AZ1085 is available in 1.5V, 1.8V, 2.5V, 3.3V, 5.0V and adjustable versions. The fixed versions integrate the adjust resistors. The adjustable version can set the output voltage with two external resistors.

Features

- Current Limiting and Thermal Protection
- Output Current: 3A
- Current Limit: 4.5A
- Line Regulation: 0.015% (Typical)
- Load Regulation: 0.1% (Typical)

Applications

- High Efficiency Linear Regulators
- Battery Charger
- Post Regulation for Switching Supplies
- Microprocessor Supply
- Mother Board Power Supplies
- 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) | 3 |
| 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, 3.3, 5.0, ADJ |
| PSRR (dB) | 72 |
| 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

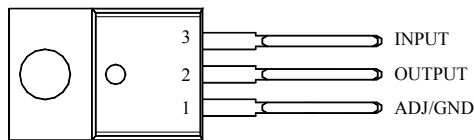
- Samples
- Data Sheet
- Reliability Report
- ESD Report



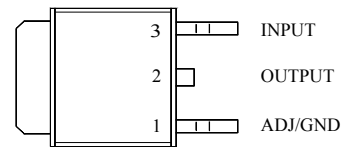
3A LOW DROPOUT LINEAR REGULATOR **AZ1085**

Pin Configuration

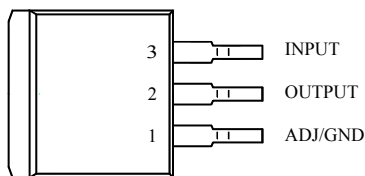
TO-220-3



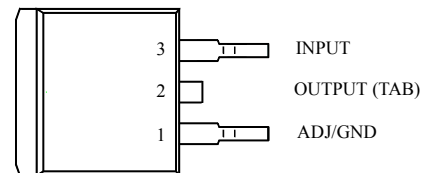
TO-252-2 (1)



TO-263-3



TO-263-2



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 | AZ1085T-ADJE1 | AZ1085T-ADJG1 | AZ1085T-ADJE1 | AZ1085T-ADJG1 | Tube |
| | | AZ1085T-1.5E1 | AZ1085T-1.5G1 | AZ1085T-1.5E1 | AZ1085T-1.5G1 | Tube |
| | | AZ1085T-1.8E1 | AZ1085T-1.8G1 | AZ1085T-1.8E1 | AZ1085T-1.8G1 | Tube |
| | | AZ1085T-2.5E1 | AZ1085T-2.5G1 | AZ1085T-2.5E1 | AZ1085T-2.5G1 | Tube |
| | | AZ1085T-3.3E1 | AZ1085T-3.3G1 | AZ1085T-3.3E1 | AZ1085T-3.3G1 | Tube |
| | | AZ1085T-5.0E1 | AZ1085T-5.0G1 | AZ1085T-5.0E1 | AZ1085T-5.0G1 | Tube |

Detailed information please refer to the relevant datasheet.

Sales Office:

Shanghai

No. 1600, Zi Xing Road, Shanghai ZiZhu Science-based Industrial Park, 200241, China
Tel : 86-21-24162266
Fax : 86-21-24162277

USA

30920 Huntwood Ave. Hayward, CA 94544, USA
Tel : +1-510-324-2988
Fax : +1-510-324-2788

Taiwan

4F, 298-1 Rui Guang Road, Nei-Hu District, Taipei, Taiwan
Tel : 886-2-2656-2808
Fax : 886-2-2656-2806

Shenzhen

Room E, 5F, Noble Center, No.1006, 3rd Fuzhong Road, Futian District, Shenzhen 518026, China
Tel : 86-755-8826 7951
Fax : 86-755-8826 7865