

November 22, 1999

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DESCRIPTION

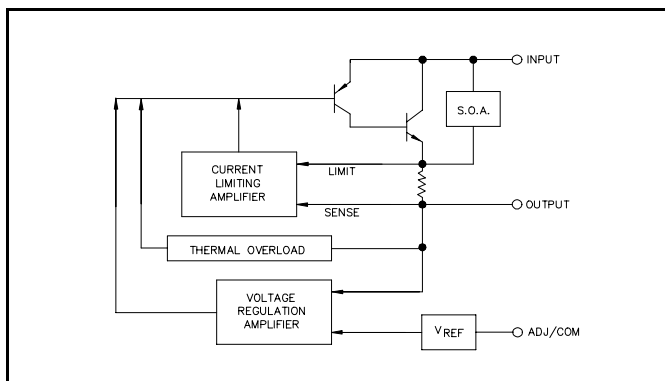
The EZ1584 series of high performance positive voltage regulators are designed for use in applications requiring low dropout performance at full rated current. Additionally, the EZ1584 series provides excellent regulation over variations in line, load and temperature.

Outstanding features include low dropout performance at rated current, fast transient response, internal current limiting and thermal shutdown protection of the output device. The EZ1584 series are three terminal regulators with fixed and adjustable voltage options available in the popular TO-220 package.

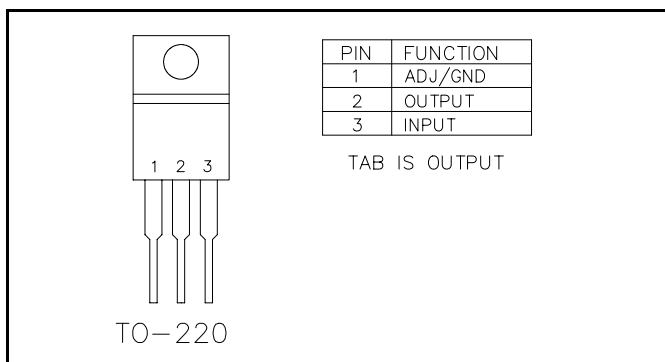
APPLICATIONS

- Pentium® Processor supplies
- PowerPC™ supplies
- Other 2.5V to 3.6V microprocessor supplies
- Low voltage logic supplies
- Battery-powered circuitry
- Post regulator for switching supply

BLOCK DIAGRAM



PIN CONFIGURATION



FEATURES

- Low dropout performance, 1.3V max. for EZ1584
- Full current rating over line and temperature
- Fast transient response
- $\pm 2\%$ total output regulation over line, load and temperature
- Adjust pin current max 90 μ A over temperature
- Fixed/adjustable output voltage
- Line regulation typically 0.015%
- Load regulation typically 0.05%
- TO-220 package

ORDERING INFORMATION

DEVICE	PACKAGE	V _{OUT} VOLTS
EZ1584CT-X.X	TO-220	See Note (1)

Note:

(1) Where X.X denotes voltage options. Available voltages are: 1.5V, 2.5V and 3.3V. Leave blank for adjustable version (1.3 to 5.7V). Contact factory for additional voltage options.

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Maximum	Units
Input Supply Voltage	V _{IN}	7	V
Power Dissipation	P _D	Internally Limited	W
Thermal Resistance Junction to Case TO-220	θ_{JC}	2	$^{\circ}\text{C/W}$
Thermal Resistance Junction to Ambient TO-220	θ_{JA}	50	$^{\circ}\text{C/W}$
Operating Junction Temperature Range	T _J	0 to 125	$^{\circ}\text{C}$
Storage Temperature Range	T _{STG}	-65 to 150	$^{\circ}\text{C}$
Lead Temperature (Soldering) 10 Sec	T _{LEAD}	260	$^{\circ}\text{C}$