

FEATURES

Wide input voltage range: 4 V to 28 V

Maximum output current: 50 mA

Low light load current

28 μ A at 0 μ A load

35 μ A at 100 μ A load

Low shutdown current: 0.7 μ A

Low dropout voltage: 275 mV @ 50 mA load

Initial accuracy: $\pm 0.5\%$

Accuracy over line, load, and temperature: $\pm 2\%$

Stable with small 1 μ F ceramic output capacitor

Fixed 3.3 V and 5.0 V output voltage options

Adjustable output voltage option: 1.225 V to 5.0 V

Current limit and thermal overload protection

Logic controlled enable

Space-saving MSOP package

ENHANCED PRODUCT FEATURES

Enhanced processing (EP) for -55°C to $+125^{\circ}\text{C}$ operation

APPLICATIONS

DC-to-dc post regulation

PCMCIA regulation

Keep-alive power in portable equipment

Industrial applications

Aeronautic and military operating temperature environment

GENERAL DESCRIPTION

The ADP1720-EP is a high voltage, micropower, low dropout linear regulator. Operating over a very wide input voltage range of 4 V to 28 V, the ADP1720-EP can provide up to 50 mA of output current. With just 28 μ A of quiescent supply current and a micropower shutdown mode, this device is ideal for applications that require low quiescent current.

The ADP1720-EP is available in fixed output voltages of 3.3 V and 5.0 V. An adjustable version is also available, which allows the output to be set anywhere between 1.225 V and 5.0 V. An enable function that allows external circuits to turn on and turn off the ADP1720 output is available. For automatic startup, the enable (EN) pin can be connected directly to the input rail.

TYPICAL APPLICATION CIRCUITS

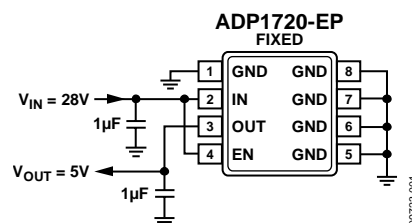


Figure 1. ADP1720-EP with Fixed Output Voltage, 5.0 V

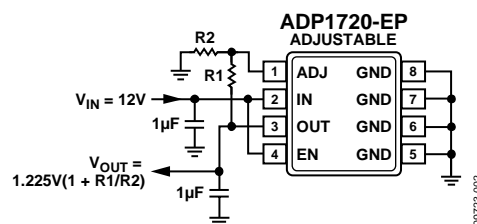


Figure 2. ADP1720-EP with Adjustable Output Voltage, 1.225 V to 5.0 V

The ADP1720-EP is optimized for stable operation with small 1 μ F ceramic output capacitors, allowing for good transient performance while occupying minimal board space.

The ADP1720-EP operates from -55°C to $+125^{\circ}\text{C}$ and uses current limit protection and thermal overload protection circuits to prevent damage to the device in adverse conditions.

Available in a small MSOP package, the ADP1720-EP provides a compact solution with low thermal resistance.

Additional application and technical information can be found in the [ADP1720](#) data sheet.

Rev. A

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