

1.0A Low Dropout Linear Regulator

The AZ1117E series is a low dropout positive voltage regulator, with a typical dropout of 1.1V at 1A of load current.

The device features onchip thermal shutdown. It also includes a bandgap reference and a current limiting circuit.

The AZ1117E is available in an adjustable version and six fixed output versions of 1.2, 1.5,1.8, 2.5, 3.3 and 5V.

The adjustable version can set the output voltage with two external resistors.

The AZ1117E series is available in the industry standard packages SOT223



The Diodes Advantage

The AZ1117E is a Bipolar LDO with 1A output current capacity, which offers a wide input range and is suitable for a multiple of power systems

Wide Input Range

AZ1117E Bipolar process offers a wide input voltage range

Low Dropout Voltage: Typical 1.1V at 1A

Can meet low dropout applications

■ Adjust Pin Current: 45 µA (Typ)

Power saving

Available in a Adjustable Version

The adjustable version can set output voltage flexibly with two external resistors

Current Limiting and Thermal Protection

Provides protection against any condition of excessive junction temperature

Compatible with low ESR Ceramic Capacitor

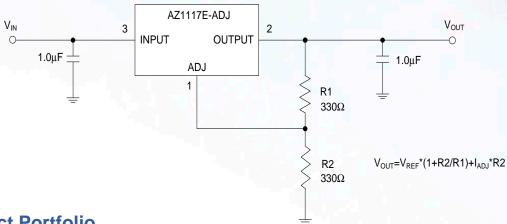
Maximum design flexibility



New Product Announcement

AZ1117E

Typical Application Schematic:



Product Portfolio

Part Number	V _{IN(V)}	V _{out(v)}	I _{OUT(A)}	V _{DROPOUT} @ full load(V)	I _{ADJ(mA)}	Package
AZ1117E	up to 13	ADJ(1.25) 1.2/1.5/1.8/2.5/3.3/5.0	1	1.1	3.5	SOT223

Ordering Information

Device	Packaging	Marking ID	Reel Size	Quantity
AZ1117EH-ADJTRG1	SOT223	GH23H	13"	4000
AZ1117EH-1.2TRG1	SOT223	GH23F	13"	4000
AZ1117EH-1.5TRG1	SOT223	GH27F	13"	4000
AZ1117E-1.8TRG1	SOT223	GH18G	13"	4000
AZ1117EH-2.5TRG1	SOT223	GH23G	13"	4000
AZ1117EH-3.3TRG1	SOT223	GH27G	13"	4000
AZ1117EH-5.0TRG1	SOT223	GH18H	13"	4000

All variants are in packages that are "Green" Molding Compound (No Br, Sb) with Lead Free Finish/RoHS Compliant (Note 1) Notes:1. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes 2 Codes for date coding on part marks

Y Year 0~9

YY Year 08, 09 etc W A~Z week 1~26 a~z week 27~53

WW Week 01~52

X A~Z: Green