



Low Quiescent Current LDO Regulator

The AZ2117 is a bipolar low dropout regulator with low quiescent current.

It is optimized for low output voltages where transient response and minimum input voltage are critical. Its trimmed bandgap reference assures output voltage accuracy to be within $\pm 1\%$. On-chip thermal shutdown provides protection against a combination of high current and ambient temperature that would create excessive junction temperature.

The AZ2117 is available in an adjustable version which allows any output voltage to be set using two external resistors.

It is available in SOT223 with the industry-standard '1117 pin out.



The Diodes Advantage

The AZ2117 maximizes system run times with its extremely low quiescent current.

- **Low Quiescent Current at 300 μ A**
Minimizes standby power in low-power systems
- **Wide Input Voltage: 3.0V to 15V**
Covers 5V, 9V and 12V power rails
- **Adjustable Output Voltage**
Through external two adjustable resistance, output voltage can be from 1.25 V to 12 V - covers standard I/O voltage levels
- **1.0% Output Accuracy at Room Temperature**
Maintains accuracy under all conditions
- **Built-in Over-temperature protection (OTP) Function**
Protects system from over-temperature conditions

Applications

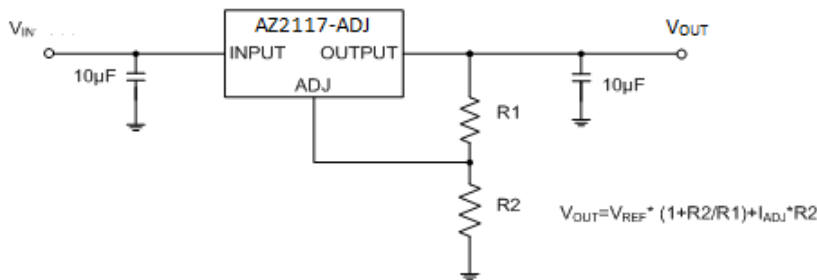
- USB Device
- Add-on Card
- DVD Player
- PC Motherboard



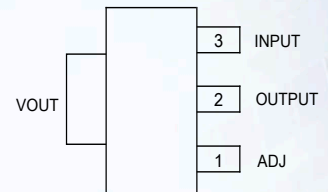
New Product Announcement

AZ2117

Typical Applications Circuit



SOT223



Product Portfolio

Part Number	Output Current (A)	Max Dropout Voltage (V)	Quiescent Current (µA)	PSRR (dB)	Min Input Voltage (V)	Max Input Voltage (V)	Output Voltage (V)	Junction Temperature Range (°C)	Package
AZ2117	1	1.5	300	53	3	15	ADJ (1.25)	-40 to 125	SOT223
AZ1117C	1	1.4	6,000	70	2.6	15	ADJ(1.25), 5, 3.3, 2.5, 1.8, 1.5, 1.2	-20 to 125	SOT223, TO252
AZ1117E	1	1.3	3,500	70	2.5	13	ADJ(1.25), 5, 3.3, 2.5, 1.8, 1.5, 1.2	-40 to 125	SOT223
AZ1117I	1	1.4	4,000	70	2.6	15	ADJ(1.25), 5, 3.3, 2.5, 1.8, 1.5, 1.2	-40 to 125	SOT223, TO252
ZLDO1117Q	1	1.35	4,000	80	2.55	20	ADJ(1.25), 5, 3.3, 2.5, 1.8, 1.5, 1.2	-40 to 125	SOT223, TO252

Single LDO Web: <https://www.diodes.com/products/power-management/low-dropout-regulators/single-ldos/#>
 Product page: <https://www.diodes.com/products/power-management/low-dropout-regulators/single-ldos/part/AZ2117>
 Datasheet: <https://www.diodes.com/assets/Datasheets/AZ2117.pdf>

Ordering Information

Part Number	Marking ID	Temperature Range	Package	Packing
AZ2117H-ADJTRG1	GH15P	-40°C to +125°C	SOT223	4,000/Tape & Reel