

**600mA LOW DROPOUT LINEAR REGULATOR****AP2317****Description**

The AP2317 is a series of low dropout three-terminal regulators with a dropout of 1.1V at 600mA output current.

This product has been optimized for low voltage where transient response and minimum input voltage are critical. The AP2317 provides current limit and thermal shutdown. Its circuit includes a trimmed bandgap reference to assure output voltage accuracy to be within $\pm 1\%$. On-chip thermal shutdown provides protection against any combination of overload and ambient temperatures that would create excessive junction temperatures.

The AP2317 is available in 2.5V and 3.3V versions. The fixed versions integrate the corresponding resistor divider. It is also available in an adjustable version which can set the output voltage with two external resistors.

Features

- Low Dropout Voltage: 1.1V at 600mA Output Current
- Output Noise from 10Hz to 10KHz: 0.003% of V_{OUT}
- PSRR at $I_{OUT}=300mA$ and $f=120Hz$: 75dB
- Output Voltage Accuracy: $\pm 1\%$
- On-chip Thermal Shutdown
- Maximum Quiescent Current: $I_{QMAX}=5mA$
- ESD (Human Body Model): 3.5KV
- Operation Junction Temperature: -40 to 125°C

Applications

- DVD/CD-ROM
- USB Device
- Add-on Card
- DVD Player
- PC Motherboard

Benefits

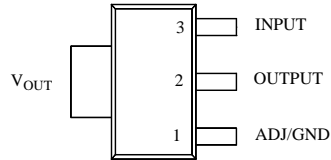
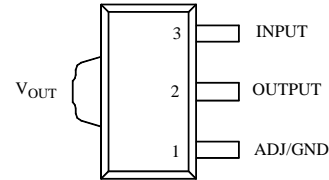
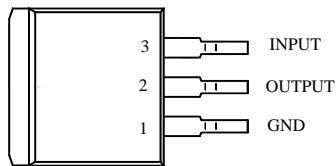
- Easier to Use
- Very Competitive Price

Parametric Table

I_{OUT} (Max) (A)	0.6
Quiescent Current (Max) (mA)	5
V_{DROP} (Typ) (V)	1.1
V_{IN} (Min) (V)	2.5 (ADJ)
V_{IN} (Max) (V)	15
V_{OUT} (V)	2.5, 3.3, ADJ
PSRR (dB)	75
Accuracy (%)	± 1
Load Regulation (Typ) (%)	0.2 (ADJ)
Line Regulation (Typ) (%)	0.035 (ADJ)
On/Off Pin	No
Error Flag	No
Operating Junction Temperature (Min) (°C)	-40
Operating Junction Temperature (Max) (°C)	125

Additional Available Materials

- Samples
- Data Sheet
- Reliability Report
- ESD Report

**600mA LOW DROPOUT LINEAR REGULATOR****AP2317****Pin Configuration****SOT-223****SOT-89-3****TO-263-3****Ordering Information Example**

Package	Temperature Range	Part Number		Marking ID		Packing Type
		Tin Lead	Lead Free	Tin Lead	Lead Free	
SOT-89-3	-40 to 125°C	AP2317R-ADJTR	AP2317R-ADJTRE1	R27A	E27A	Tape & Reel
		AP2317R-2.5TR	AP2317R-2.5TRE1	R27B	E27B	Tape & Reel
		AP2317R-3.3TR	AP2317R-3.3TRE1	R27C	E27C	Tape & Reel
SOT-223	-40 to 125°C	AP2317H-ADJTR	AP2317H-ADJTRE1	H27A	EH27A	Tape & Reel
		AP2317H-2.5TR	AP2317H-2.5TRE1	H27B	EH27B	Tape & Reel
		AP2317H-3.3TR	AP2317H-3.3TRE1	H27C	EH27C	Tape & Reel
TO-263-3	-40 to 125°C	AP2317S-3.3	AP2317S-3.3E1	AP2317S-3.3	AP2317S-3.3E1	Tube
		AP2317S-3.3TR	AP2317S-3.3TRE1	AP2317S-3.3	AP2317S-3.3E1	Tape & Reel

Detailed information please refer to the relevant datasheet.

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