

**300mA FIXED OUTPUT VOLTAGE LDO REGULATOR****AP2117****Description**

The AP2117 is positive voltage regulator IC designed by CMOS process. The AP2117 has features of low dropout voltage, low noise, high output voltage accuracy and low current consumption. It consists of a voltage reference, an error amplifier, a resistor network for setting output voltage, a current limit circuit for current protection, a circuit for over-temperature protection, and a chip enable circuit. Thus, the AP2117 is suitable for various power sources for portable application.

**Features**

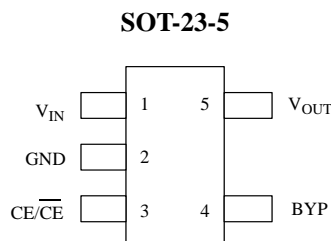
- High Ripple Rejection: 70dB at f=1KHz
- Ultra Low Dropout Voltage: 0.3V Typical at  $I_{OUT}=300mA$
- Low Operation Current: 80 $\mu A$  Typical
- High Line Regulation: 4mV Typical
- High Load Regulation: 12mV Typical at  $I_{OUT}=300mA$
- High Output Voltage Accuracy:  $\pm 2\%$
- Output Voltage: 1.8V, 2.5V, 2.8V, 3.0V, 3.3V

**Applications**

- Mobile Phones, Cordless Phones
- Portable Games
- Cameras
- Portable AV Equipment
- Battery Powered Equipment

**Benefits**

- Low Noise
- High PSRR
- Very Competitive Price

**Pin Configuration****Parametric Table**

$I_{OUT}$ (Min) (A)	0.3
Quiescent Current (Typ) (mA)	0.08
$V_{DROP}$ (Typ) (V)	0.3 (Except 1.8V)
$V_{IN}$ (Min) (V)	2.2
$V_{IN}$ (Max) (V)	6.5
$V_{OUT}$ (V)	1.8, 2.5, 2.8, 3.0, 3.3
PSRR (dB)	70
Accuracy (%)	$\pm 2$
Load Regulation (Typ) (mV)	12 (3.0V)
Line Regulation (Typ) (mV)	4 (3.0V)
On/Off Pin	Yes
Error Flag	No
Operating Junction Temperature (Min) ( $^{\circ}C$ )	-40
Operating Junction Temperature (Max) ( $^{\circ}C$ )	125

**Additional Available Materials**

- Samples
- Preliminary Datasheet
- Reliability Report
- ESD Report

**300mA FIXED OUTPUT VOLTAGE LDO REGULATOR****AP2117****Ordering Information Example**

Package	Temperature Range	Part Number		Marking ID		Packing Type
		Tin Lead	Lead Free	Tin Lead	Lead Free	
SOT-23-5	-40 to 125°C	AP2117BK-1.8TR	AP2117BK-1.8TRE1	K9B	E9B	Tape & Reel
		AP2117BK-2.5TR	AP2117BK-2.5TRE1	K9D	E9D	Tape & Reel
		AP2117BK-2.8TR	AP2117BK-2.8TRE1	K9F	E9F	Tape & Reel
		AP2117BK-3.0TR	AP2117BK-3.0TRE1	K9H	E9H	Tape & Reel
		AP2117BK-3.3TR	AP2117BK-3.3TRE1	K9J	E9J	Tape & Reel

Detailed information please refer to the relevant datasheet.

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