

**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

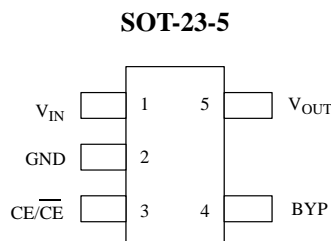
- High Ripple Rejection: 70dB at f=1KHz
- Ultra Low Dropout Voltage: 0.3V Typical at $I_{OUT}=300mA$
- Low Operation Current: 80 μA Typical
- High Line Regulation: 4mV Typical
- High Load Regulation: 12mV Typical at $I_{OUT}=300mA$
- High Output Voltage Accuracy: $\pm 2\%$
- Output Voltage: 1.8V, 2.5V,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

Sales Office:**USA**

3170 De La Cruz Blvd, Suite # 105 Santa Clara, CA 95054-2411,
U.S.A
Tel : +1-408-988 6388
Fax : +1-408-988 6386

Shanghai

8F, B Zone, 900 Yi Shan Road, Shanghai 200233,
China
Tel : 86-21-6495 9539
Fax : 86-21-6485 9673

Taiwan

4F, 298-1 Rui Guang Road, Nei-Hu District, Taipei,
Taiwan
Tel : 886-2-2656-2808
Fax : 886-2-2656-2806

Shenzhen

Room 27B, Tower C, No. 2070, Shennanzhong Road, Shenzhen
518031, China
Tel : 86-755-8368 3987
Fax : 86-755-8368 3166