

AP7315 – 150mA High PSRR Low Noise LDO

The AP7315 is a low dropout regulator with high outputvoltage accuracy, low $R_{DS(ON)}$, high PSRR, low output noise and low quiescent current. This regulator is based on a CMOS process.

The AP7315 includes a voltage reference, error amplifier, current limit circuit and an enable pin. With the integrated resistor network, fixed output voltage versions can be delivered.

With its low power consumption and line and load transient response, the AP7315 is well suited for low power handheld communication equipment.

The AP7315 is packaged in the industry standard SOT23, SOT25 and X2-DFN1010-4 packages and allows for smallest footprint and dense PCB layout.



The Diodes Advantage

- Wide Input Voltage: 1.7V to 5.25V
 Offers lower operation down to 1.7V supporting operation over entire range of Li-on battery cells.
- Wide Output Voltage:0.9V to 3.6V Wide output voltage suitable for all applications
- High PSRR (75dB @ 1kHz) and Low Noise (60µVrms @ 10Hz 100kHz) Suitable for noise sensitive applications such as audio, video and RF sub-systems
- 1.0% Output Accuracy at Room Temperature, 1.5% over -40 to +85°C Maintains accuracy over all conditions
- Miniaturized Package, DFN1010-4 (1.0mmx1.0mmx0.4mm), SOT23 & SOT25 The small package dimensions and thin height meets small footprint and low profile requirements of the latest portable equipment
- Low Quiescent Current at 35µA
 Offers power saving in low-power and battery operated products

Circuit Functions

 Enable for shutdown with autodischarge

Applications

- Smart phones/tablets
- Portable video
- Wireless adaptor/RF supply
- Overtemperature protection
- Fold-back short protection

Cameras

- Portable media players
- Wireless communication

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Typical Application Circuit



Product Portfolio

Part Number	V _{IN} (V)	V _{OUT1} (V)	I _{оит} (mA)	V _{DROP} @ Full Load (mV)	Ι _Q (μΑ)	PSRR @1kHz (dB)	Noise (µVrms)	Output Accuracy (%)	Enable	BYPASS Cap	Package
AP7315X	1.7 to 5.25	1.1~3.3	150	220	35	75	60	1	Yes	No	DFN1010-4 SOT23 SOT25
AP7340X	1.7 to 5.25	1.1~3.3	150	220	35	75	60	1	Yes	No	DFN1010-4

Ordering Information



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