

CONSTANT VOLTAGE AND CONSTANT CURRENT CONTROLLER
AP4313

Description

The AP4313 is a highly integrated solution for a constant voltage/constant current mode SMPS application.

The AP4313 contains one 1.21V voltage reference with $\pm 1\%$ accuracy, one current sensing circuit and two operational amplifiers. Combining the voltage reference with one operational amplifier makes AP4313 an ideal voltage controller for use in adapters and battery chargers. The other low voltage reference combined with the other operational amplifier makes it an ideal current limiter for output low side current sensing.

The AP4313 is available in SOT-23-6 package.

Features

- Constant Voltage and Constant Current Control
- Precision Internal Voltage Reference
- Few External Components
- Easy Compensation
- Low Supply Current: 0.5mA
- Operating Temperature Range: -40 to 105°C

Applications

- Adapters
- Battery Chargers

Benefits

- Easier to Use
- Low Supply Current
- High V_{REF} Accuracy
- Ultra Low Temperature Coefficient
- Very Competitive Price

Parametric Table

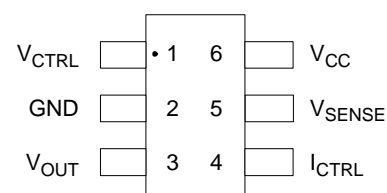
V_{REF} (Typ) (V)	1.21
Supply Current (Max) (mA)	1.2
Supply Voltage (Max) (V)	18
Current Control Loop Reference (Typ) (mV)	200
Transconduction Gain (V_{CTRL}) (Typ) (mA/mV)	3.5
Transconduction Gain (I_{CTRL}) (Typ) (mA/mV)	7
Output Short Circuit Current (Typ) (mA)	27
Ambient Temperature (Min) (°C)	-40
Ambient Temperature (Max) (°C)	105

Additional Available Materials

- Samples
- Data Sheet
- Reliability Report
- ESD Report

Pin Configuration

SOT-23-6



**CONSTANT VOLTAGE AND CONSTANT CURRENT CONTROLLER****AP4313****Ordering Information Example**

Package	Temperature Range	Part Number		Marking ID		Packing Type
		Tin Lead	Lead Free	Tin Lead	Lead Free	
SOT-23-6	-40 to 105°C	AP4313KTR	AP4313KTR-E1	K6G	E6G	Tape & Reel

Detailed information please refer to the relevant datasheet.

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Apr. 2007

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