

# XC6203 Series

(Large Current) Positive Voltage Regulators

## General Description

The XC6203 series are highly precise, low power consumption, positive voltage regulators manufactured using CMOS and laser trimming technologies.

The series provides large currents with a significantly small dropout voltage.

The XC6203P consists of a current limiter circuit, a driver transistor, a precision reference voltage and an error amplifier. Output voltage is selectable in 0.1V steps between a voltage of 1.8V and 6.0V.

The IC benefits from output current control & output pin short protection as a result of the built-in current limiter (foldback) circuit.

SOT-223 package.

## Features

Maximum Output Current: 400mA

Maximum Operating Voltage: 10V

Output Voltage Range: 1.8V to 6.0V (selectable in 0.1V steps)

Highly Accurate:  $\pm 2\%$

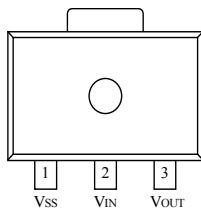
Low Power Consumption: TYP 8.0  $\mu\text{A}$

Output Voltage Temp. Characteristics: TYP 100ppm/ $^{\circ}\text{C}$

Operational Temperature Range:  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$

Small Package: SOT-223

## Pin Configuration



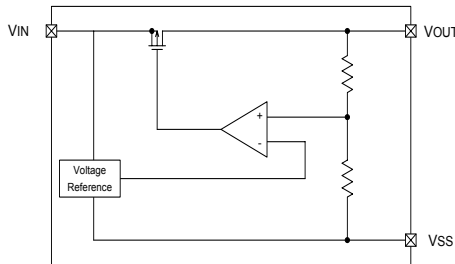
Preliminary  
SOT-223  
(TOP VIEW)

## Pin Assignment

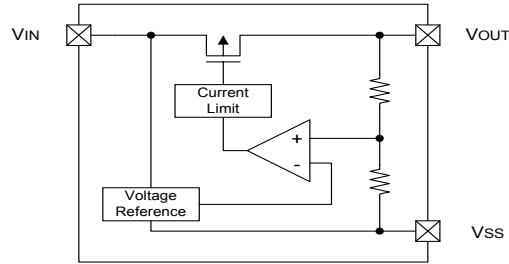
PIN NUMBER	PIN NAME	FUNCTION
1	VSS	Ground
2	VIN	Power Input
3	VOUT	Output

## Block Diagram

(1) XC6203E



(2) XC6203P



## Ordering Information

XC6203①②③④⑤⑥

DESIGNATOR	SYMBOL	DESCRIPTION	DESIGNATOR	SYMBOL	DESCRIPTION
①	Type of Regulator		⑤	F	Package Type SOT-223 (1reel=1000pcs.)
	P	Current limiter circuit built-in			
	E	No current limiter circuit built-in			
②③④	18 ~ 60 & A	e.g. 252: 2.5V, Accuracy $\pm 2\%$ 332: 3.3V, Accuracy $\pm 2\%$ 28A: 2.85V, Accuracy $\pm 2\%^*$			
④	2	Output Voltage Accuracy $\pm 2\%$	⑥	Device Orientation	
				R	Embossed Tape: Standard
				L	Embossed Tape: Reverse

Note\*: Output Voltage in 50mV steps is applied only for 2.85V type.