

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)

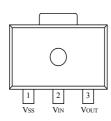
Highly Accurate: ± 2%

Low Power Consumption: TYP 8.0 μA

Output Voltage Temp. Characteristics: TYP 100ppm/ $^{\circ}$ C Operational Temperature Range: -40 $^{\circ}$ C to 85 $^{\circ}$ C

Small Package: SOT-223

Pin Configuration



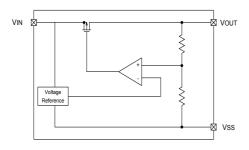
Preliminary SOT-223 (TOP VIEW)

Pin Assignment

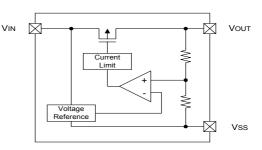
| PIN NUMBER | PIN NAME | FUNCTION | |
|------------|----------|-------------|--|
| 1 | VSS | Ground | |
| 2 | VIN | Power Input | |
| 3 | VOUT | Output | |

Block Diagram

(1) XC6203E



(2) XC6203P



Ordering Information

XC6203①②③④⑤⑥

| X00203@@@@@@ | | | | | | | |
|--------------|-------------------|-------------------------------------|------------|--------------------|--|--|--|
| DESIGNATOR | SYMBOL | DESCRIPTION | DESIGNATOR | SYMBOL | DESCRIPTION | | |
| | Type of Regulator | | | | | | |
| ① | Р | Current limiter circuit built-in | \$ | | Package Type SOT-223 (1reel=1000pcs.) | | |
| | Е | No current limiter circuit built-in | | | | | |
| 234 | 18 ~ 60 & A | e.g. 252: 2.5V, Accuracy±2% | | | | | |
| | | 332: 3.3V, Accuracy±2% | | | | | |
| | | 28A: 2.85V, Accuracy±2%* | | | | | |
| (4) | _ | Output Voltage Accuracy | (6) | Device Orientation | | | |
| | | ±2% | | R | Embossed Tape: Standard | | |
| | | | | L | Embossed Tape: Reverse | | |

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

