

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 2.0V 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-89 (500mW) package.

Features

Maximum Output Current: 400mA

Maximum Operating Voltage: 10V

Output Voltage Range: 2.0V to 6.0V (selectable in 0.1V steps)

Highly Accurate: $\pm 2\%$

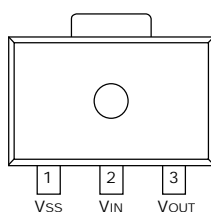
Low Power Consumption: TYP 8.0 μA

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

Operational Temperature Range: -40°C to 85°C

Ultra Small Package: SOT-89

Pin Configuration



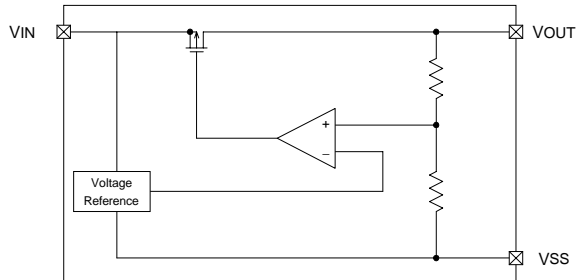
SOT-89
(TOP VIEW)

Pin Assignment

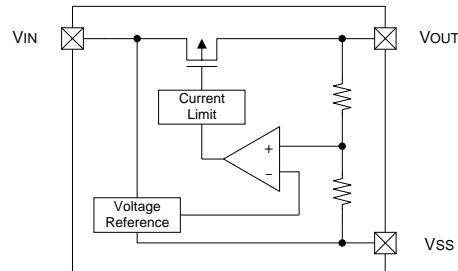
PIN NUMBER	PIN NAME	FUNCTION
1	VSS	Ground
2	VIN	Power Input
3	VOUT	Output

Block Diagram

(1) XC6203E



(2) XC6203P



Ordering Information

XC6203

DESIGNATOR	SYMBOL	DESCRIPTION	DESIGNATOR	SYMBOL	DESCRIPTION
	Type of Regulator				
	P	Current limiter circuit built-in		P	Package Type
	E	No current limiter circuit built-in			SOT-89
	18 ~ 60 & A	e.g. 252 : 2.5V, Accuracy $\pm 2\%$ 332 : 3.3V, Accuracy $\pm 2\%$ 28A : 2.85V, Accuracy $\pm 2\%^*$			
	2	Output Voltage Accuracy $\pm 2\%$		Device Orientation	
				R	Orientation of Device: Right
				L	Orientation of Device: Left

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