

3. Voltage Regulators

XC6202 Series

(High Voltage) Positive Voltage Regulators

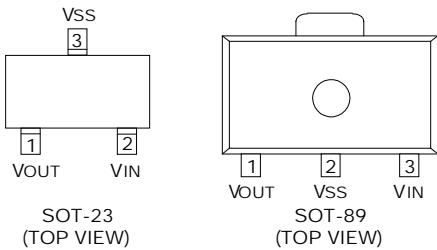
General Description

The XC6202 series are highly precise, low power consumption, high voltage, positive voltage regulators manufactured using CMOS and laser trimming technologies. The XC6202 consists of a current limiter circuit, a driver transistor, a precision reference voltage and an error correction circuit. Since the current limiter circuit is built-in, the IC is protected against overshoot currents at such times of output shorts etc. SOT-23 (150mW) and SOT-89 (500mW) packages are available.

Features

Maximum Output Current: 100mA
Dropout Voltage: 200mV @ 30mA
Operating Voltage Range: up to 20V
Output Voltage Range: 1.8V to 6.0V (selectable in 0.1V steps)
Highly Accurate: $\pm 2\%$
Low Power Consumption: TYP 7.0 μ A (5.0V)
Output Voltage Temp. Characteristics: TYP $\pm 100\text{ppm}/^\circ\text{C}$
Line Regulation: TYP 0.2% / V
Ultra Small Packages: SOT-23 (150mW), SOT-89 (500mW)

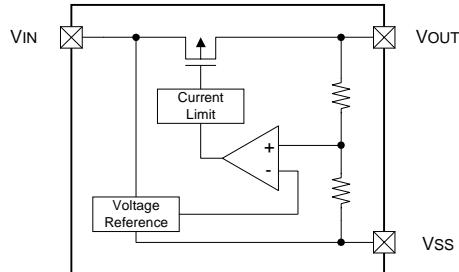
Pin Configuration



Pin Assignment

| PIN NUMBER | | PIN NAME | FUNCTION |
|------------|--------|----------|-------------|
| SOT-23 | SOT-89 | | |
| 1 | 1 | VOUT | Output |
| 3 | 2 | VSS | Ground |
| 2 | 3 | VIN | Power Input |

Block Diagram



Ordering Information

XC6202P

| DESIGNATOR | SYMBOL | DESCRIPTION |
|------------|---------|---|
| | 18 ~ F0 | Output Voltage For the voltage above 10V, see the example 10=A, 11=B, 12=C, 13=D, 14=E, 15=F e.g. VOUT = 3.0V : 3, : 0 VOUT = 12V : C, : 0 VOUT = 15V : F, : 0 |
| | 2 | Accuracy : $\pm 2\%$ |
| | M | Package : SOT-23 (1reel = 3000pcs) |
| | P | SOT-89 (1reel = 1000pcs) |
| | R | Embossed Tape : Standard Feed |
| | L | Embossed Tape : Reverse Feed |