

## XC6201 Series

### Positive Voltage Regulators

#### General Description

The XC6201 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 XC6201 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.

SOT-25 (150mW) and SOT-89 (500mW) packages are available.

#### Features

Maximum Output Current: 250mA(TYP)

Dropout Voltage: 0.16V @ 100mA

Maximum Operating Voltage: 10V

Output Voltage Range: 1.7V to 6.0V (selectable in 0.1V steps)

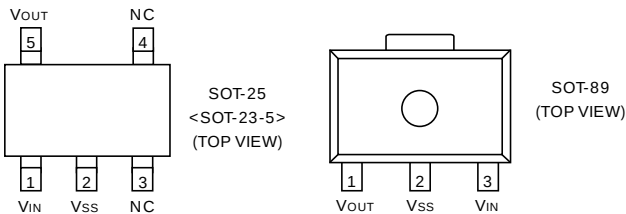
Highly Accurate:  $\pm 2\%$

Low Power Consumption: TYP 2.0  $\mu$ A

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

Ultra Small Packages: SOT-25 (150mW), SOT-89 (500mW)

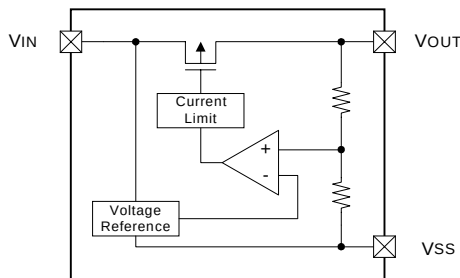
#### Pin Configuration



#### Pin Assignment

| PIN NUMBER |        | PIN NAME | FUNCTION      |
|------------|--------|----------|---------------|
| SOT-25     | SOT-89 |          |               |
| 5          | 1      | VOUT     | Output        |
| 2          | 2      | VSS      | Ground        |
| 1          | 3      | VIN      | Power Input   |
| 3          | -      | (NC)     | No Connection |
| 4          | -      | (NC)     | No Connection |

#### Block Diagram



#### Ordering Information

XC6201\_P c d e f  
 ↑ ↑  
 a b

| DESIGNATOR | SYMBOL | DESCRIPTION                                   | DESIGNATOR | SYMBOL             | DESCRIPTION                                                        |
|------------|--------|-----------------------------------------------|------------|--------------------|--------------------------------------------------------------------|
| a          | 1      | Indicates the product number                  | d          | 1/2                | Output Voltage Accuracy<br>e.g. 1 : $\pm 1.0\%$<br>2 : $\pm 2.0\%$ |
| b          | P      | Type of regulator<br>3- pin                   | e          | Package Type       |                                                                    |
|            |        |                                               |            | M                  | M=SOT-25                                                           |
|            |        |                                               |            | P                  | P=SOT-89                                                           |
| c          | 17~60  | Output Voltage<br>e.g. 30 : 3.0V<br>50 : 5.0V | f          | Device Orientation |                                                                    |
|            |        |                                               |            | R                  | Embossed Tape:standard loading                                     |
|            |        |                                               |            | L                  | Embossed Tape:reverse loading                                      |