

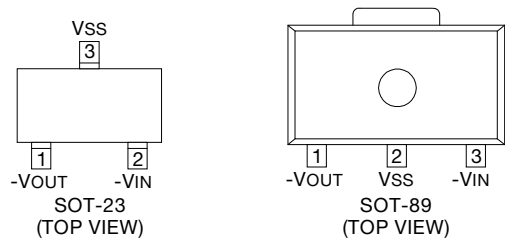
XC62KN Series

Negative Voltage Regulators

General Description

The XC62K series are highly precise, low power consumption, negative voltage regulators, manufactured using CMOS and laser trimming technologies. The series achieves high output currents with small input-output voltage differentials, and consists of a high precision voltage reference, an error correction circuit, and an output driver with current limitation. SOT-23 (150mW) and SOT-89 (500mW) packages are available.

Pin Configuration



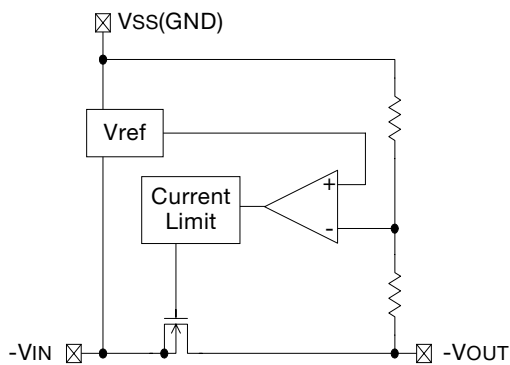
Features

- Low Dropout Voltage:** 120mV @50mA (-5.0V)
- Maximum Output Current:** 100mA (within Maximum power dissipation, Vout= -5.0V)
- Output Voltage:** -2.1V to -6.0V in 0.1V increments -5.0V, -4.0V, -3.0V, -2.5V standard (all other voltages are semi-custom)
- Highly Accurate:** Setup voltage accuracy $\pm 2\%$ ($\pm 1\%$ for semi-custom products)
- Low power consumption:** TYP 3.0 μ A [Vout= -5.0V]
- Output voltage temperature characteristics:** TYP ± 100 ppm/ $^{\circ}$ C
- Line regulation:** TYP 0.1 %/V
- Ultra small package:** SOT-23 (150mW) mini-mold : SOT-89 (500mW) mini-power mold

Pin Assignment

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

Block Diagram



Ordering Information

XC62K x x x x x x
↑ ↑ ↑ ↑ ↑ ↑
a b c d e f

| DESIGNATOR | DESCRIPTION | DESIGNATOR | DESCRIPTION |
|------------|--|------------|---|
| a | Polarity of Output Voltage N = Negative | e | Package Type M = SOT-23 P = SOT-89 |
| b | Output Voltage 30 = 3.0V 50 = 5.0V | | |
| c | Temperature Characteristics 0 = ± 100 ppm/ $^{\circ}$ C (typical) | f | Device Orientation R = Embossed Tape (Orientation of Device : Right) L = Embossed Tape (Orientation of Device : Left) |
| d | Accuracy 1 = $\pm 1.0\%$ (Semi-custom products) 2 = $\pm 2.0\%$ | | |