

# XC62FP Series Positive Voltage Regulators

## General Description

The XC62FP series is a group of positive voltage output, three-pin regulators, that provide a high current even when the input/output voltage differential is small. Low power consumption and high accuracy is achieved through CMOS and laser trimming technologies. The XC62FP consists of a high-precision voltage reference, an error correction circuit, and a current limited output driver. Transient response to load variations have improved in comparison to the existing series.

SOT-23 (150mW) and SOT-89 (500mW) packages are available.

## Features

**Max. output current:** 250mA

(within max. power dissipation,  $V_{OUT} = 5.0V$ )

**Output voltage:** 2.0V to 6.0V in 0.1V increments  
(1.1V to 1.9V for custom products)

**Highly accurate:** Output voltage  $\pm 2\%$   
( $\pm 1\%$  for semi-custom products)

**Low power consumption:** Typ.  $2.0\mu A$  at  $V_{OUT} = 5.0V$

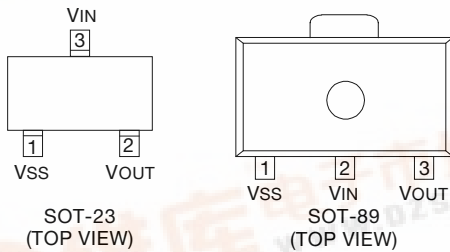
**Output voltage temperature coefficient:** 0.1% / V; Typ.  $\pm 100ppm/^{\circ}C$

**Line regulation:** Typ. 0.2% / V

**Dropout voltage:**  
120mV @ 100mA (5.0V)

**Ultra small package:** SOT-23 (150mW) mini-mold and SOT-89 (500mW) mini-power mold  
\*TO-92 (300mW) package also available.  
(order basis)

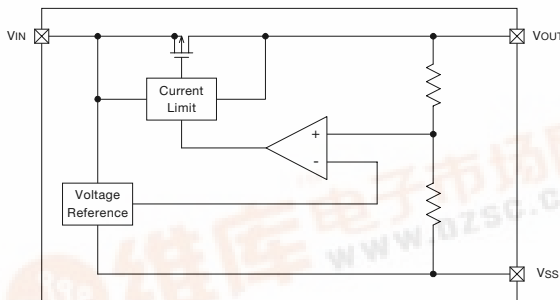
## Pin Configuration



## Pin Assignment

PIN NUMBER		PIN NAME	FUNCTION
SOT-23	SOT-89		
1	1	VSS	Ground
3	2	VIN	Supply voltage input
2	3	VOUT	Regulated voltage output

## Block Diagram



## Ordering Information

XC62FP<sub>a</sub>x<sub>b</sub>x<sub>c</sub>x<sub>d</sub>x<sub>e</sub>x<sub>f</sub>  
 ↑ ↑ ↑ ↑ ↑ ↑  
 a b c d e f

DESIGNATOR	DESCRIPTION	DESIGNATOR	DESCRIPTION
a	Polarity of Output Voltage : P : + (Positive)	e	Package Type M = SOT-23 P = SOT-89 T = TO-92
b	Output Voltage : 30 = 3.0V 50 = 5.0V		
c	Temperature Coefficients : 0 = $\pm 100ppm$ (typical)	f	Device Orientation : R = Embossed Tape ( Right ) L = Embossed Tape ( Left ) H = PaperTape (TO-92) B = Bag (TO-92)
d	Output Voltage Accuracy : 1 = $\pm 1.0\%$ ( Semi-Custom ) 2 = $\pm 2.0\%$		

