

**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.  $\pm 100\text{ppm}/^\circ\text{C}$

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

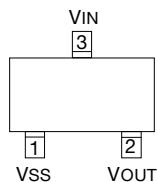
**Dropout voltage:**

120mV @ 100mA (5.0V)

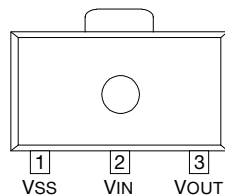
**Ultra small package:** SOT-23 (150mW) mini-mold and

SOT-89 (500mW) mini-power mold

\*TO-92 (300mW) package also available.  
(order basis)

**Pin Configuration**

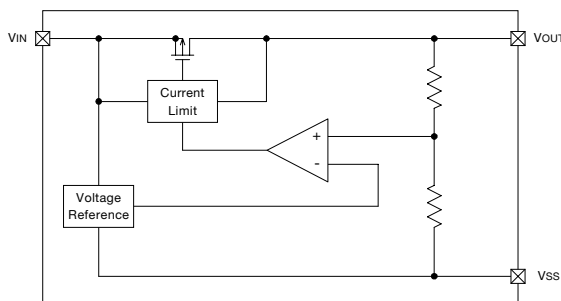
SOT-23  
(TOP VIEW)



SOT-89  
(TOP VIEW)

**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 x x x x x x  
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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 = $\pm 100\text{ppm}$ (typical)	f	Device Orientation : R = Embossed Tape ( Right ) L = Embossed Tape ( Left ) H = Paper Tape (TO-92) B = Bag (TO-92)
d	Output Voltage Accuracy : 1 = $\pm 1.0\%$ ( Semi-Custom ) 2 = $\pm 2.0\%$		