

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:

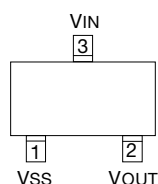
120mV @ 100mA (5.0V)

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

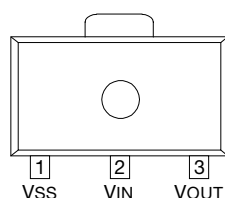
SOT-89 (500mW) mini-power mold

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

Pin Configuration



SOT-23
(TOP VIEW)

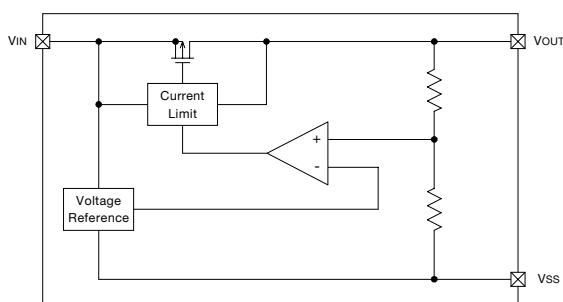


SOT-89
(TOP VIEW)

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 = $\pm 2.0\%$		