

3. Voltage Regulators

XC62H Series Positive Voltage Regulators

General Description

The XC62H series are highly precise, low power consumption, positive voltage regulators, manufactured using CMOS and laser trimming technologies. The series consists of a high precision voltage reference, an error correction circuit, and an output driver with current limitation.

By way of the CE function, with output turned off, the series enters stand-by. In the stand-by mode, power consumption is greatly reduced.

SOT-25 (150mW) and SOT-89-5 (500mW) packages are available.

In relation to the CE function, as well as the positive logic XC62HR series, a negative logic XC62HP series (custom) is also available.

Features

Maximum Output Current: 165mA

(within Maximum power dissipation, $V_{out}=3.0V$)

Output Voltage Range: 2.0V to 6.0V in 0.1V increments
(1.1V to 1.9V semi-custom)

Highly Accurate: Setup voltage $\pm 2\%$
($\pm 1\%$ for semi-custom products)

Low power consumption:

TYP $3\mu A$ [$V_{out}=3.0$, Output enabled]

TYP $0.1\mu A$ [Output disabled]

Output voltage temperature characteristics:

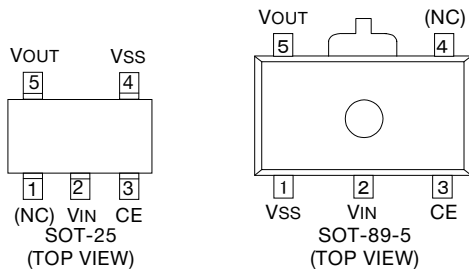
TYP $\pm 100ppm/^{\circ}C$

Line regulation: TYP 0.2%/V

Ultra small package: SOT-25 (150mW) mini-mold

: SOT-89-5(500mW) mini-power mold

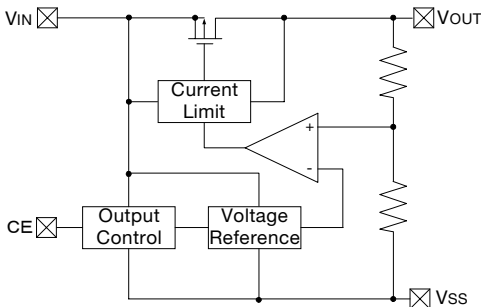
Pin Configuration



Pin Assignment

PIN NUMBER		PIN NAME	FUNCTION
SOT-25	SOT-89-5		
1	4	(NC)	No Connection
2	2	VIN	Supply Voltage Input
3	3	CE	Chip Enable
4	1	VSS	Ground
5	5	VOUT	Regulated Output Voltage

Block Diagram



Ordering Information

XC62H x x x x x x
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 a b c d e f

DESIGNATOR	DESCRIPTION	DESIGNATOR	DESCRIPTION
a	True Logic Level at CE Pin : R = Positive P = Negative (Custom)	e	Package Type M = SOT-25 P = SOT-89-5
b	Output Voltage : 30 = 3.0V 50 = 5.0V		
c	0	f	Device Orientation : R = Embossed Tape (Right) L = Embossed Tape (Left)
d	Output Voltage Accuracy : 1 = $\pm 1.0\%$ (Semi-Custom) 2 = $\pm 2.0\%$		