

### 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:**

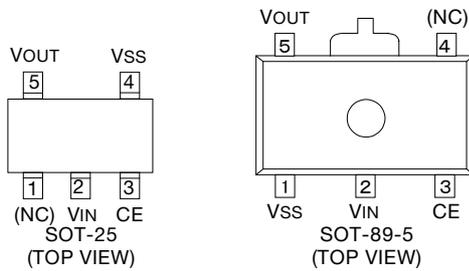
TYP  $\pm 100ppm/^{\circ}C$

**Line regulation:** TYP 0.2%/V

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

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

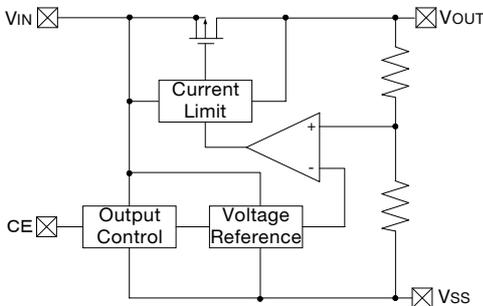
#### Pin Configuration



#### 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 = $\pm 2.0\%$		