XC66D Series

Positive Voltage Regulator with built-in Voltage Detect Functions

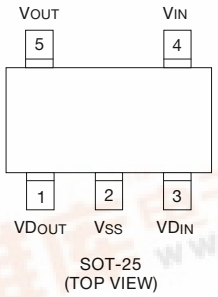
General Description

The XC66D series consists of a voltage detector and voltage regulator built into the one chip and is, essentially, a voltage regulator with voltage detect capabilities.
Low power consumption and high accuracy is achieved through CMOS and laser trimming technologies.
The detector features an output driver, hysteresis circuit, comparator and extremely accurate standard voltage.
The regulator features an error correction circuit, output driver with current limiter functions, minimal input-output voltage differential and similarly accurate standard voltage.
SOT-25 (150mW) package available.

Features

Maximum Output Current:
100mA(Within the max. continuous total power dissipation, VOUT=5.0V)
Output Voltage Range:
2.0V to 6.0V programmable in 0.1V steps (Standard 5.0V)
Highly Accurate Output Voltage: Set-up voltage accuracy ± 2%
Output Voltage Temp.Characteristics: TYP ± 100ppm/°C
Detect Voltage Range: 1.8V to 6.0V programmable in 0.1V steps
Highly Accurate Detect Voltage: Set-up voltage accuracy ± 2%
Low Power Consumption: TYP 3.2μA (VOUT = 5.0V)
Detect Voltage Temp.Characteristics: TYP ± 100ppm/°C
Detect Voltage Output Configuration: N-ch open drain
CMOS (High level = VOUT)
Line Regulation: TYP 0.1 %/V
Ultra Small Package: SOT-25 (150mW) mini-mold

Pin Configuration



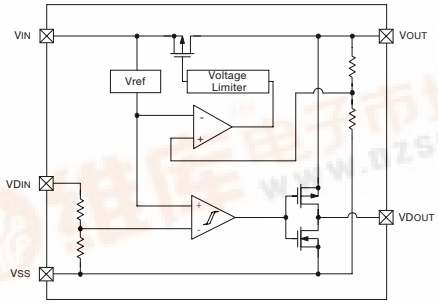
SOT-25
(TOP VIEW)

Pin Assignment

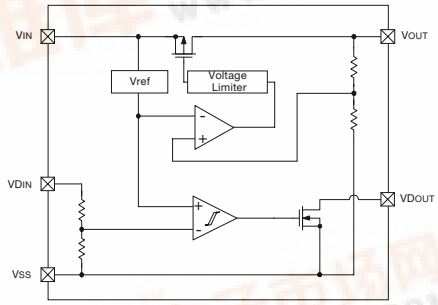
PIN NUMBER	PIN NAME	FUNCTION
1	VDOUT	Voltage Detect Output
2	VSS	Ground
3	VDIN	Voltage Detect Input
4	VIN	Power Supply
5	VOUT	Voltage Regulator Output

Block Diagram

(1) XC66DC CMOS output (High level = VOUT)



(2) XC66DN N-ch open drain



Ordering Information

XC66D × × × × × ×
a b c d e

DESIGNATOR	DESCRIPTION	DESIGNATOR	DESCRIPTION
a	Detector Output Configuration C = CMOS (High level=VOUT) N = N-ch open drain	d	Package Type M = SOT-25
b	Detect Voltage (VDF) 25 = 2.5V 38 = 3.8V	e	Device Orientation R = Embossed Tape (Orientation of device : right) L = Embossed Tape (Orientation of device : left)
c	Regulator Output Voltage (VOUT) 33 = 3.3V 50 = 5.0V		