

Voltage Detectors (Delay Circuit Built-In)

General Description

The XC61F series are highly accurate, low power consumption voltage detectors, manufactured using CMOS and laser trimming technologies.

A delay circuit is built-in to each detector.

Detect voltage is extremely accurate with minimal temperature drift.

Both CMOS and N channel open drain output configurations are available.

Since the delay circuit is built-in, peripherals are unecessary and high density mounting is possible.

Features

Highly Accurate: Detect voltage ± 2%

Low Power Consumption: TYP $1.0\mu A$ [VIN=2.0V] Detect Voltage Range: 1.6V to 6.0V in 0.1V increments

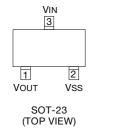
Operating Voltage Range: 0.7V to 10.0V

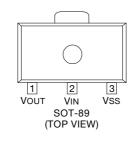
Detect Voltage Temperature Characteristics: TYP ± 100ppm/°C

Built-In Delay Circuit:

1ms to 50ms, 50ms to 200ms, 80ms to 400ms Output Configuration: N-channel open drain or CMOS Ultra Small Packages: SOT-23 (150mW) mini-mold SOT-89 (500mW) mini-power mold

Pin Configuration



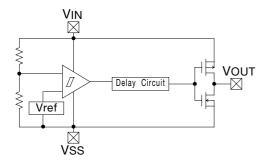


Pin Assignment

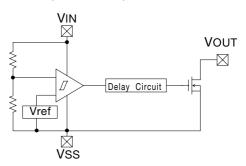
PIN NUMBER		PIN	FUNCTION	
SOT-23	SOT-89	NAME	FUNCTION	
3	2	VIN	Supply Voltage Input	
2	3	Vss	Ground	
1	1	Vout	Output	

Block Diagram

(1) CMOS output



(2) N-channel open drain output



Ordering Information

$$\begin{array}{c} \mathsf{XC61F} \times \underbrace{\times \times} \times \times \times \times \\ \uparrow \quad \uparrow \quad \uparrow \quad \uparrow \quad \uparrow \quad \uparrow \quad \end{array}$$

a b cdef

DESIGNATOR	DESCRIPTION	DESIGNATOR	DESCRIPTION
а	Output Configuration : C = CMOS N = Nch open drain		Package Type: M = SOT-23 P = SOT-89
b	Detect Voltage (VDF): 25 = 2.5V 38 = 3.8V	е	
С	Output Delay : 1 = 50ms to 200ms 4 = 80ms to 400ms 5 = 1ms to 50ms	f	Device Orientation : R = Embossed Tape (Right) L = Embossed Tape (Left)
d	Detect Accuracy : 2 = within ± 2.0%		

^{*} No parts are available with an accuracy of ± 1%