

## 2. Voltage Detectors

### XC61C Series

**Low Voltage Detectors (VDF = 0.9V to 1.5V)**  
**Standard Voltage Detectors (VDF = 1.6V to 6.0V)**

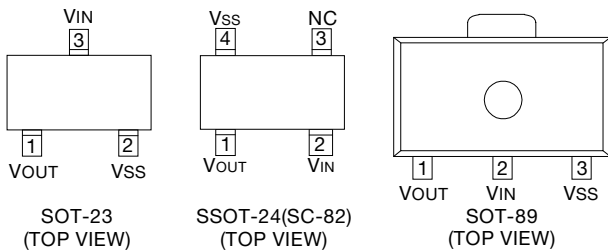
#### General Description

The XC61C series are highly precise, low power consumption voltage detectors, manufactured using CMOS and laser trimming technologies. Detect voltage is extremely accurate with minimal temperature drift. Both CMOS and N channel open drain output configurations are available.

#### Features

- Highly accurate:**  $\pm 2\%$
- Low power consumption:** TYP  $0.7\mu\text{A}$  [ $V_{\text{IN}}=1.5\text{V}$ ]
- Detect voltage range:**  
 0.9V to 1.5V in 0.1V increments (Low Voltage)  
 1.6V to 6.0V in 0.1V increments (Standard Voltage)
- Operating voltage range:** 0.7V to 6.0V (Low Voltage)  
 : 0.7V to 10.0V (Standard Voltage)
- Detect voltage temperature characteristics:** TYP  $\pm 100\text{ppm}/^\circ\text{C}$
- Output configuration:** N-channel open drain or CMOS
- Ultra small package:** SSOT-24 (150mW) super mini-mold  
 : SOT-23 (150mW) mini-mold  
 : SOT-89 (500mW) mini-power mold
- Note:** There are no products available with a set-up voltage accuracy of  $\pm 1\%$ .

#### Pin Configuration

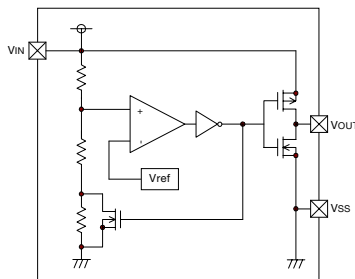


#### Pin Assignment

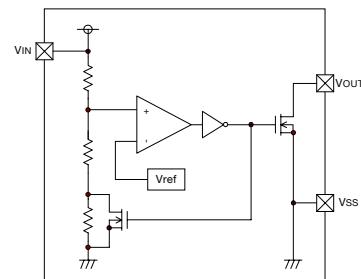
PIN NUMBER			PIN NAME	FUNCTION
SSOT-24	SOT-23	SOT-89		
2	3	2	VIN	Supply Voltage Input
4	2	3	VSS	Ground
1	1	1	VOUT	Output
3	—	—	NC	No Connection

#### Block Diagram

(1) CMOS Output



(2) Nch Open Drain Output



#### Ordering Information

XC61C x<sub>a</sub>x<sub>b</sub>x<sub>c</sub>x<sub>d</sub>x<sub>e</sub>x<sub>f</sub>  
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DESIGNATOR	DESCRIPTION	DESIGNATOR	DESCRIPTION
a	Output Configuration : C = CMOS N = Nch open drain	e	Package Type : N = SSOT-24 (SC-82) M = SOT-23 P = SOT-89 T = TO-92
b	Detect Voltage : 25 = 2.5V 38 = 3.8V		
c	Output Delay : 0 = No delay	f	Device Orientation : R = Embossed Tape ( Right ) L = Embossed Tape ( Left ) H = PaperTape (TO-92) B = Bag (TO-92)
d	Detect Accuracy : 2 = within $\pm 2.0\%$		