

XC612 Series

2 Channel Voltage Detectors

General Description

The XC612 series consist of 2 voltage detectors in 1 mini-molded, SOT-25 package. The series provides accuracy and low power consumption through CMOS processing and laser trimming and consists of a highly accurate voltage reference source, 2 comparators, hysteresis and output driver circuits. The input (VIN1) for voltage detector 1 (VD1) dually functions as the power supply pin for both detector 1 (VD1) and detector 2 (VD2).

Features

Highly Accurate:

Set-up voltage accuracy $\pm 2\%$ ($\pm 1\%$ semi-custom)

Low Power Consumption:

TYP $2.0\mu\text{A}$ ($V_{IN1}=V_{IN2}=2.0\text{V}$, quiescent state)

Detect Voltage:

1.5V to 5.0V programmable in 0.1V steps

Detector's voltages can be set-up independently

Operating Voltage Range: 1.5V to 10.0V

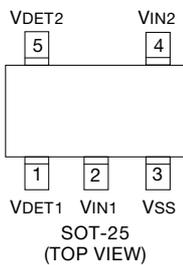
Temp.Characteristics: $\pm 100\text{ppm}/^\circ\text{C}$

Output Configuration: N-ch open drain

Small Package: SOT-25 (150mW) mini-mold

* CMOS Output is under development

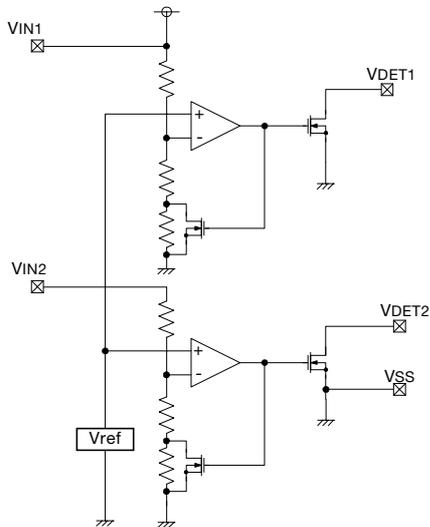
Pin Configuration



Pin Assignment

PIN NUMBER	PIN NAME	FUNCTION
1	VDET1	Voltage Detector 1 Output
2	VIN1	Voltage Detector 1 Input, Power Supply
3	VSS	Ground
4	VIN2	Voltage detector 2 Input
5	VDET2	Voltage Detector 2 Output

Block Diagram



Ordering Information

XC612 x₁x₂x₃x₄x₅x₆
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 a b c d e

DESIGNATOR	DESCRIPTION
a	Output Configuration N = N-ch open drain
b	Detect Voltage (VDET1) 25 = 2.5V 38 = 3.8V
c	Detect Voltage (VDET2) 33 = 3.3V 50 = 5.0V
d	Package Type M = SOT-25
e	Device Orientation R = Embossed Tape (Orientation of device : right) L = Embossed Tape (Orientation of device : left)