

+125°C The smallest class of package in the world  
Watchdog Timeout Period Externally Adjustable Voltage Detector

# XC6130/XC6131 Series



The XC6130/XC6131 series the smallest class package in the world are voltage detectors with a watchdog function. The watchdog timeout time and release delay time can be set as desired using a single external capacitor. These voltage detectors are used for microprocessor monitoring, and when the power voltage reaches the detect voltage or an L→H pulse is not input to the watchdog pin within the watchdog timeout time, an L level signal is output from the RESETB pin. The XC6130 series has a manual reset function. The XC6131 series has a watchdog ON/OFF function.

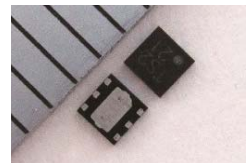


## Smallest class package in the world

The "World smallest size of 1.5mm x 1.5mm x 0.375mm (height)" is realized as voltage detector with Watch Dog timer function for +125°C operation.

- Ideal for Automotive and industrial applications because of +125°C operation temperature.
- Good fit to the applications like wearable devices, IoT related device which requires high density mounting because the package size is as small as 1.5mm x 1.5mm.

DFN1515-6A



1.5 x 1.5 x h0.375[mm]  
Small and thin package

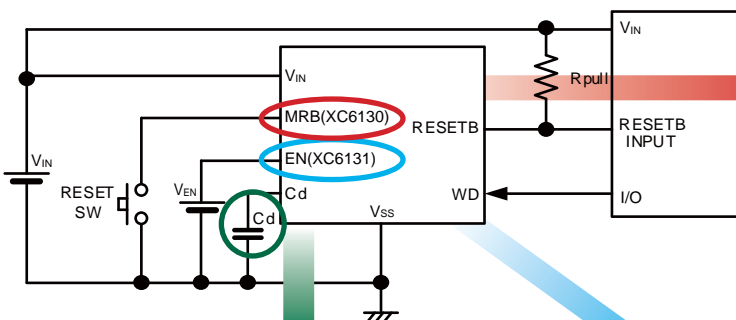
SOT-26



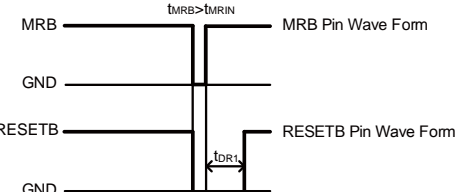
2.9 x 2.8 x h1.1[mm]  
Industry-standard package



## Watchdog function for use when needed

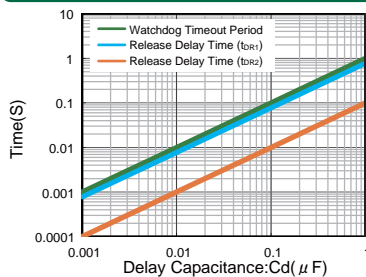


### Manual Reset Function(XC6130)



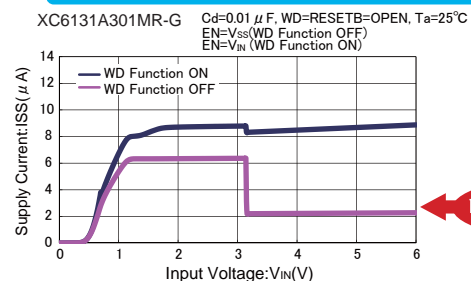
Output can be changed to Low level by changing the manual reset pin from Low level

### Watchdog Timeout, Release Delay Time



The watchdog time and detect delay time can be set by adjusting the capacitance of the external Cd capacitor

### Watchdog ON/OFF Function(XC6131)



Low Power Consumption

Low supply-current operation is possible by changing the EN pin to Low level to stop the Watchdog function

Features			
Operating Voltage Range	1.5V~6.0V	Power Consumption	8.1 μA Detect 9.8 μA Release
Detect Voltage Range	1.6V~5.0V		2.5 μA Detect (Watchdog function OFF)
Detect Voltage Accuracy	±1.0%(SOT-26), ±1.5%(DFN1515-6A)	Operating Ambient Temperature	-40°C~+125°C(Electrical characteristics specified at full Temperature)
Temperature Characteristics	±50ppm/°C	Function	Watchdog timeout period externally
Hysteresis Width	VDFL × 5%		Manual reset (XC6130)
Output Configuration	N-channel open drain output		Watchdog function OFF(XC6131)

