

## Microprocessor Reset IC

### Features

- Precision Monitoring of +3V, +3.3V, and +5V Power-Supply Voltages
- Fully Specified Over Temperature
- Available in two Output Configurations  
 Push-Pull  $\overline{\text{RESET}}$  Output (G630)  
 Open-Drain  $\overline{\text{RESET}}$  Output (G631)
- 220ms min Power-On Reset Pulse Width
- 10 $\mu$ A Supply Current
- Guaranteed Reset Valid to  $V_{CC} = +1V$
- Power Supply Transient Immunity
- No External Components
- 3-Pin SOT-23 Packages

### Applications

- Computers
- Controllers
- Intelligent Instruments
- Critical  $\mu$ P and  $\mu$ C Power Monitoring
- Portable / Battery-Powered Equipment
- Automotive

### General Description

The G630/G631 are microprocessor ( $\mu$ P) supervisory circuits used to monitor the power supplies in  $\mu$ P and digital systems. They provide excellent circuit reliability and low cost by eliminating external components and adjustments when used with +5V, +3.3V, +3.0V- powered circuits.

These circuits perform a single function: they assert a reset signal whenever the  $V_{CC}$  supply voltage declines below a preset threshold, keeping it asserted for at least 220ms after  $V_{CC}$  has risen above the reset threshold. Reset thresholds suitable for operation with a variety of supply voltages are available.

The G631 has an open-drain output stage, while the G630 have push-pull outputs. The G631's open-drain  $\overline{\text{RESET}}$  output requires a pull-up resistor that can be connected to a voltage higher than  $V_{CC}$ . The G630 have an active-low  $\overline{\text{RESET}}$  output. The reset comparator is designed to ignore fast transients on  $V_{CC}$ , and the outputs are guaranteed to be in the correct logic state for  $V_{CC}$  down to 1V.

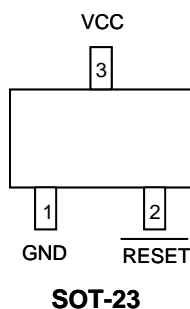
Low supply current makes the G630/G631 ideal for use in portable equipment. The G630/G631 are available in 3-pin SOT-23 packages.

### Ordering Information

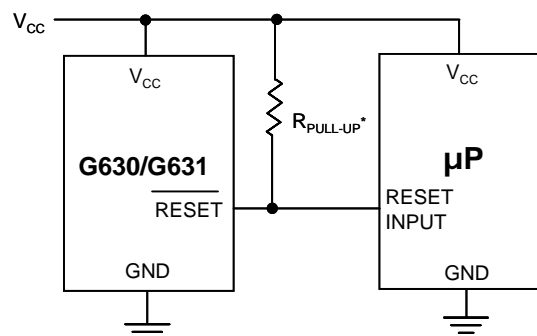
ORDER NUMBER	MARKING	RESET THRESHOLD(V)	TEMP. RANGE	OUTPUT TYPE	PACKAGE (Green)
G630L293T73U	630Ax	2.93	-40°C ~ +105°C	Push-Pull	SOT-23
G631L293T73U	631Ax	2.93	-40°C ~ +105°C	Open-Drain	SOT-23

Note: T7: SOT-23  
 3: Bonding Code  
 U: Tape & Reel

### Pin Configuration



### Typical Application Circuit



\* G631 ONLY

ICC may increased at high  $T_A$ , Therefore, can not connect Resistors to VCC to prevent Icc abnormal behavior at high  $T_A$ .