

## Product Overview

### TL331: Comparator, Single Channel, Open Collector, Low Power, Wide Supply Range

For complete documentation, see the data sheet.

The TL331 is an open collector, low-power voltage comparator designed specifically to operate over a wide supply range from 2 V to 36 V single supply and  $\pm 1$  V to  $\pm 18$  V for split supplies. The input common-mode voltage range includes ground, even when operated from a single power supply voltage.

### Features

- Wide Single Supply Voltage Range or Dual Supplies
- Low Supply Current
- Low Input Bias Current: 25 nA
- Low Input Offset Current:  $\pm 5$  nA
- Low Input Offset Voltage:  $\pm 2$  mV
- Input Common Mode Voltage Range includes Ground
- Low Output Saturation Voltage: 150 mV typ at IO = 4 mA
- Differential Input Voltage Range Equal to the Supply Voltage

### Part Electrical Specifications

Product	Compliance	Status	Channels	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	I <sub>O</sub> Typ (mA)	I <sub>CC</sub> Typ (mA)	t <sub>res</sub> Typ (ns)	V <sub>IO</sub> Max (mV)	T <sub>A</sub> Min (°C)	T <sub>A</sub> Max (°C)	Package Type
TL331SN4T3G	Pb-free Halide free	Active	1	2	36	16	0.5	400	9	-40	125	TSOP-5 / SOT-23-5
TL331VSN4T3G	AEC Qualified PPAP Capable Pb-free Halide free	Active	1	2	36	16	0.6	400	9	-40	125	TSOP-5 / SOT-23-5

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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