

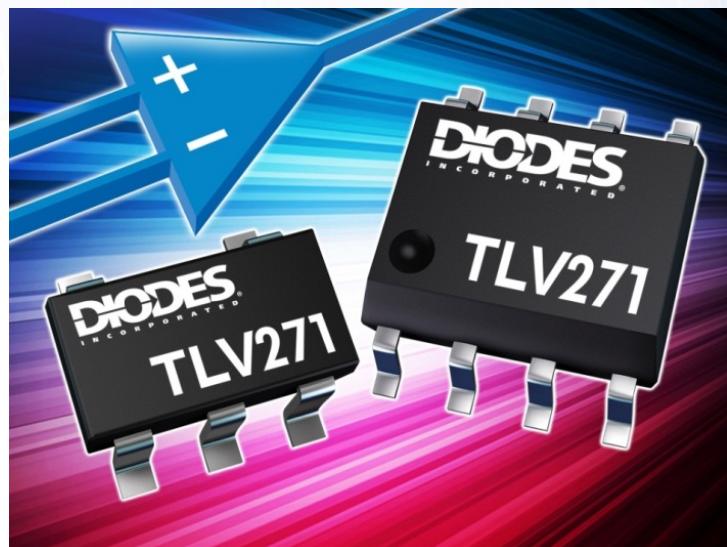
Single Rail to Rail Output CMOS Op-Amps

The TLV271 is an industry standard single, rail to rail output, CMOS op-amp. These devices offer a minimum operating supply voltage of 2.7V with a rail-to-rail output voltage swing.

The TLV271 also provides 2MHz bandwidth and 1.4V/ μ s slew rate from only 550 μ A supply current.

The devices are specified for 5V and ± 5 V supplies with a maximum recommended supply voltage of 16V. The devices can therefore be operated from a variety of rechargeable cells, including 2.7V operation with Li Ion cells, making them ideal for battery powered applications. The CMOS inputs enable use in high-impedance sensor applications.

The TLV271 is available in either SOT23-5 or SO8 packaging. Two temperature grades are available for the parts; C grade offers 0 to 70°C operating, I grade offers -40 to 125°C operating.



The Diodes Advantage

- **Industry standard part number and specification**
Economic drop in replacement for alternative parts
- **Rail to rail output swing**
Optimises output swing range particularly when used with low supply voltages
- **2MHz bandwidth and 1.4V/ μ s slew rate**
Enhanced performance provides upgrade to circuits using TLC27 series op-amps
- **Operation down to 2.7V and 550 μ A supply current**
Ideal for low power and battery powered applications
- **Low noise operation**
Typically 30 nV/ $\sqrt{\text{Hz}}$ at 1 kHz.



Single Rail to Rail Output CMOS Op-Amps

Part Number	Number of Channels	Supply Voltage Range (V)	Maximum Supply Current (µA)	Typical Slew Rate (V/µs)	Typical Unity Gain Bandwidth (MHz)	Maximum Input Offset Voltage (mV)	Maximum Input Bias Current (pA)	Minimum CMRR (dB)	Operating Ambient Temperature Range (°C)	Package Outlines
TLV271CW5-7	1	2.7 to 16	660	1.4	2	5	60	69	0 to 70	SOT25
TLV271CS-13	1	2.7 to 16	660	1.4	2	5	60	69	0 to 70	SO8
TLV271IW5-7	1	2.7 to 16	660	1.4	2	5	60	69	-40 to 125	SOT25
TLV271IS-13	1	2.7 to 16	660	2.4	3	5	60	69	-40 to 125	SO8

To find out more information:
Op Amp overview page

http://www.diodes.com/catalog/operational_amplifiers_75/?id_pages=2&

Ordering Information

Device	Package	Reel size	Quantity per reel	Tape width
TLV271CW5-7	SOT25	7"	3000	8mm
TLV271CS-13	SO8	13"	2500	12mm
TLV271IW5-7	SOT25	7"	3000	8mm
TLV271IS-13	SO8	13"	2500	12mm

Notes:

1. No purposely added lead. Fully EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant.
2. See <http://www.diodes.com> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and 1000ppm antimony compounds.