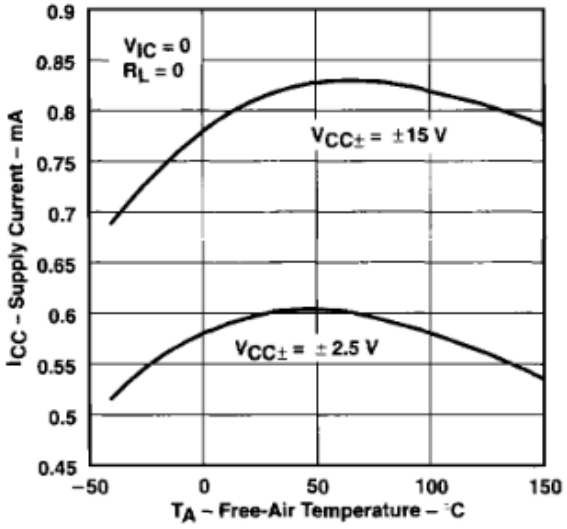
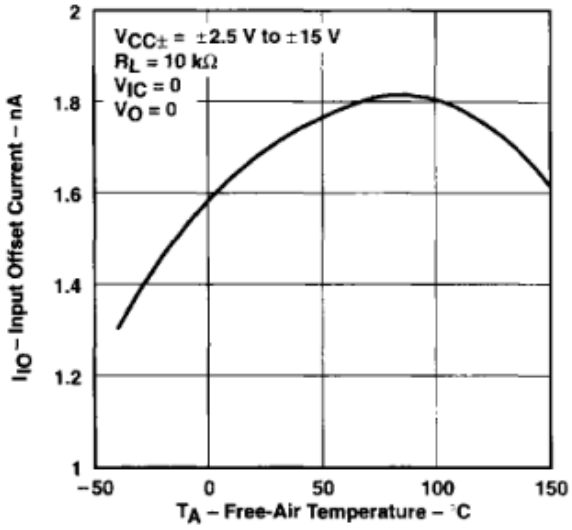
- **Free-Air Operating Temperature Range −40°C to 150°C**
- **Wide Range of Supply Voltages: Single Supply . . . 4 V to 30 V or Dual Supplies**
- **Low Supply Current Drain independent of Supply Voltage . . . 0.8 mA**
- **Internal Frequency Compensation**
- **Low Input Bias and Offset Parameters at 25°C**
  - **Input Offset Voltage . . . 3 mV Typ**
  - **Input Offset Current . . . 2 nA Typ**
  - ***Input Bias Current* . . . 15 nA Typ**
- **Differential Input Voltage Range Equal to Maximum-Rated Supply Voltage . . . 30 V**
- **Open-Loop Differential Voltage Amplification . . . 100 V/mV Typ at 25°C**

description

SUPPLY CURRENT vs FREE-AIR TEMPERATURE



INPUT OFFSET CURRENT vs FREE-AIR TEMPERATURE



description

These devices consist of four independent, high-gain frequency-compensated operational amplifiers that are designed specifically to operate from a single supply over a wide range of voltages. Operation from split supplies is also possible as long as the difference between the two supplies is 4 V to 30 V, and V_{CC} is at least 1.5 V more positive than the input common-mode voltage. The low supply current drain is independent of the magnitude of the supply voltage.

Applications include transducer amplifiers, dc amplification blocks, and all the conventional operational amplifier circuits that now can be implemented more easily in single-supply-voltage systems. For example, the TL2829 can be operated on automotive engine blocks directly off the standard 12-V supply with minimal electrical protection.

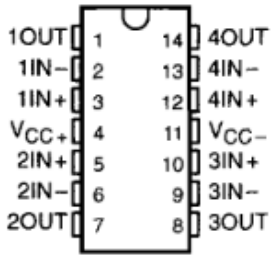
The TL2829 is characterized for operation over the extended temperature range of −40°C to 150°C.

AVAILABLE OPTIONS

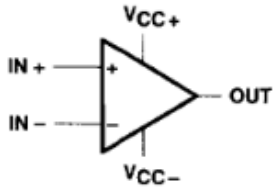
T_A	V_{IO}max AT 25°C	PACKAGED DEVICES		CHIP FORM (Y)
		SMALL OUTLINE (D)	PLASTIC DIP (N)	
−40°C to 150°C	7 mV	TL2829ZD	TL2829ZN	TL2829Y

The D packages are available taped and reeled. Add R suffix to device type (i.e., TL2829ZDR).

TL2829Z . . . D OR N PACKAGE
(TOP VIEW)



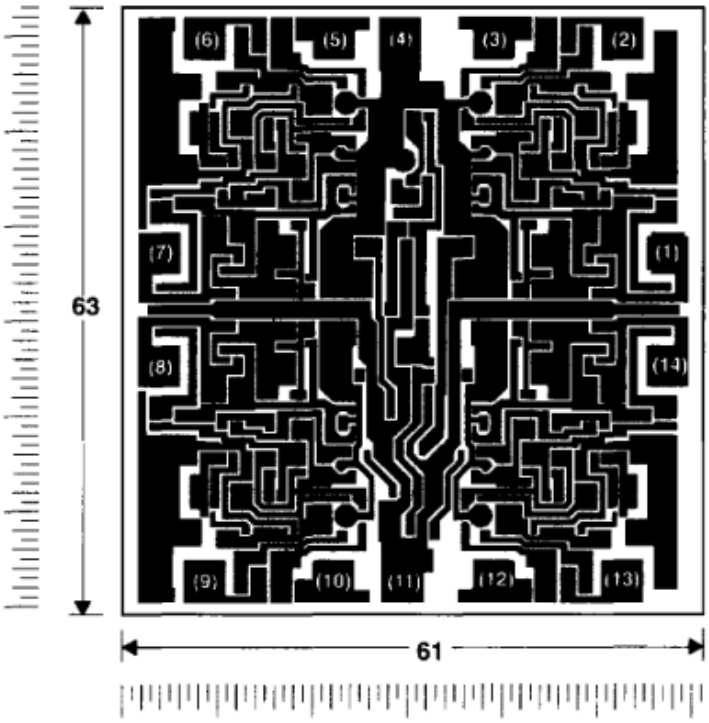
symbol (each amplifier)

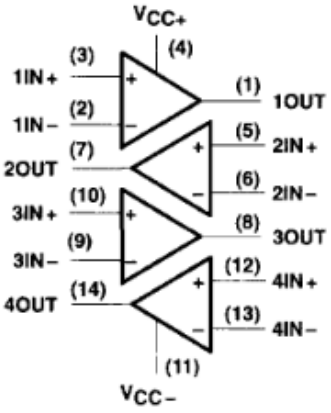


TL2829Y chip information

This chip, properly assembled, displays characteristics similar to the TL2829. Thermal compression bonding may be used on the gold bonding pads. Chips may be mounted with conductive epoxy or a gold-silicon preform.

BONDING PAD ASSIGNMENTS





CHIP THICKNESS: 15 TYPICAL

BONDING PADS: 4 X 4 MINIMUM

$T_J$max = 165°C

TOLERANCES ARE ± 10%.

ALL DIMENSIONS ARE IN MILS.