

# Op Amp Single Low Input Bias Current Amplifier R-R I/O 5.5V 8-Pin PDIP Tube

Manufacturer:	Texas Instruments, Inc
Package/Case:	DIP8
Product Type:	Amplifier ICs
RoHS:	RoHS Compliant/Lead free W
Lifecycle:	Active



Images are for reference only

# **General Description**

The OPA344 and OPA345 series rail-to-rail CMOS operational amplifiers are designed for precision, low-power, miniature applications. The OPA344 is unity gain stable, while the OPA345 is optimized for gains greater than or equal to five, and has a gain-bandwidth product of 3MHz.

The OPA344 and OPA345 are optimized to operate on a single supply from 2.5V and up to 5.5V with an input common-mode voltage range that extends 300mV beyond the supplies. Quiescent current is only  $250\mu$ A (max).

Rail-to-rail input and output make them ideal for driving sampling analog-to-digital converters. They are also well suited for general purpose and audio applications and providing I/V conversion at the output of D/A converters. Single, dual and quad versions have identical specs for design flexibility. A variety of packages are available. All are specified for operation from -40°C to 85°C. A SPICE macromodel for design analysis is available for download from www.ti.com.

# **Key Features**

RAIL-TO-RAIL INPUT

RAIL-TO-RAIL OUTPUT (within 1mV)

LOW QUIESCENT CURRENT: 150µA typ

MicroSIZE PACKAGES SOT23-5

MSOP-8

TSSOP-14

GAIN-BANDWIDTH OPA344: 1MHz,  $G \ge 1$ 

OPA345: 3MHz,  $G \ge 5$ 

SLEW RATE OPA344: 0.8V/µs

OPA345: 2V/µs

THD + NOISE: 0.006%

APPLICATIONS PCMCIA CARDS

DATA ACQUISITION

PROCESS CONTROL

AUDIO PROCESSING

COMMUNICATIONS

ACTIVE FILTERS

TEST EQUIPMENT

All trademarks are the property of their respective owners.

#### Description

The OPA344 and OPA345 series rail-to-rail CMOS operational amplifiers are designed for precision, low-power, miniature applications. The OPA344 is unity gain stable, while the OPA345 is optimized for gains greater than or equal to five, and has a gain-bandwidth product of 3MHz.

The OPA344 and OPA345 are optimized to operate on a single supply from 2.5V and up to 5.5V with an input common-mode voltage range that extends 300mV beyond the supplies. Quiescent current is only  $250\mu$ A (max).

Rail-to-rail input and output make them ideal for driving sampling analog-to-digital converters. They are also well suited for general purpose and audio applications and providing I/V conversion at the output of D/A converters. Single, dual and quad versions have identical specs for design flexibility. A variety of packages are available. All are specified for operation from -40°C to 85°C. A SPICE macromodel for design analysis is available for download from www.ti.com.

## **Recommended For You**

# OPA445BMOPA1611AIDROPA388QDBVRQ1Texas Instruments, IncTexas Instruments, IncTexas Instruments, IncCANSOP8SOT23-5

# AVAQ SEMICONDUCTOR CO., LIMITED

# OPA2365AQDRQ1

Texas Instruments, Inc

SOP8

#### **OPA656U**

Texas Instruments, Inc SOP8

# OPA353UA

Texas Instruments, Inc SOP8

# **OPA453FAKTWT**

Texas Instruments, Inc

TO263-7

#### **OPA334AIDBVR**

Texas Instruments, Inc SOT23-6

OPA360AIDCKR Texas Instruments, Inc SC70-6

## LM13700MX/NOPB

Texas Instruments, Inc SOP16

# **OPA4251UA**

Texas Instruments, Inc SOP14

#### OPA2835IDGSR

Texas Instruments, Inc MSOP10

# LMI11H/NOPB

Texas Instruments, Inc CAN8

# OPA633KP

Texas Instruments, Inc DIP8

## LMV321M5X/NOPB

Texas Instruments, Inc SOT23-5