

Op Amp Single Micropower Amplifier R-R I/O $\pm 2.75\text{V}/5.5\text{V}$ Automotive 5-Pin SOT-23 T/R

Manufacturer:	Texas Instruments, Inc	<input type="text" value="OPA333AQDBVRQ1 Image"/>
Package/Case:	SOT23-5	Images are for reference only
Product Type:	Amplifier ICs	<input type="button" value="Inquiry"/>
RoHS:	RoHS Compliant/Lead free 	
Lifecycle:	Active	

General Description

The OPA333-Q1 CMOS operational amplifier uses a proprietary autocalibration technique to simultaneously provide very low offset voltage (10 μV maximum) and near-zero drift over time and temperature. This miniature, high-precision, low-quiescent-current amplifier offers high-impedance inputs that have a common-mode range 100 mV beyond the rails, and rail-to-rail output that swings within 50 mV of the rails. The device can use single or dual supplies as low as 1.8 V (± 0.9 V) and up to 5.5 V (± 2.75 V), and is optimized for low-voltage single-supply operation.

The OPA333-Q1 device offers excellent common-mode rejection ratio (CMRR) without the crossover associated with traditional complementary input stages. This design results in superior performance for driving analog-to-digital converters (ADCs) without degradation of differential linearity.

Key Features

AEC-Q100 qualified for automotive applications:
Temperature grade 1: -40°C to $+125^{\circ}\text{C}$, T_{A}

Low offset voltage: 10 μV (maximum)

0.01-Hz to 10-Hz noise: 1.1 μV_{PP}

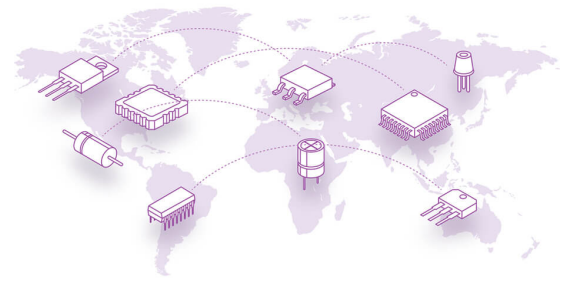
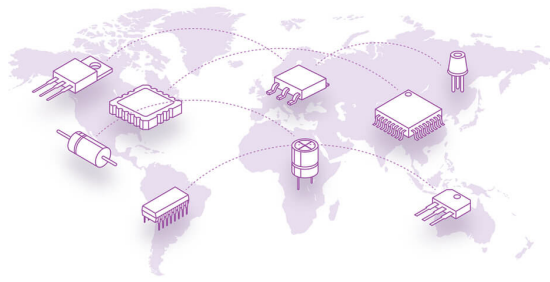
Quiescent current: 17 μA

Single-supply operation

Supply voltage: 1.8 V to 5.5 V

Rail-to-rail input and output

Microsize 5-pin SOT-23 (DBV) package



Recommended For You

OPA445BM

Texas Instruments, Inc

CAN

OPA1611AIDR

Texas Instruments, Inc

SOP8

OPA388QDBVRQ1

Texas Instruments, Inc

SOT23-5

OPA2365AQDRQ1

Texas Instruments, Inc

SOP8

OPA334AIDBVR

Texas Instruments, Inc

SOT23-6

OPA2835IDGSR

Texas Instruments, Inc

MSOP10

OPA656U

Texas Instruments, Inc

SOP8

OPA360AIDCKR

Texas Instruments, Inc

SC70-6

LMI11H/NOPB

Texas Instruments, Inc

CAN8

OPA353UA

Texas Instruments, Inc

SOP8

LMI3700MX/NOPB

Texas Instruments, Inc

SOP16

OPA633KP

Texas Instruments, Inc

DIP8

OPA453FAKTWT

Texas Instruments, Inc

TO263-7

OPA4251UA

Texas Instruments, Inc

SOP14

LMV321M5X/NOPB

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