

# OPA2354AQDGKRQ1

# Op Amp Dual High Speed Amplifier R-R I/O $\pm 2.75$ V/5.5V Automotive 8-Pin VSSOP T/R

Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: MSOP8

**Product Type:** Amplifier ICs

RoHS: RoHS Compliant/Lead free RoHS

**Lifecycle:** Active



Images are for reference only

Inquiry

## **General Description**

The design of the OPAx354-Q1 family of high-speed, voltage-feedback CMOS operational amplifiers is for video and other applications requiring wide bandwidth. These devices are unity-gain stable and can drive large output currents. Differential gain is 0.02% and differential phase is 0.09°. Quiescent current is only 4.9 mA per channel.

The OPAx354-Q1 family of operational amplifiers (op-amps) are optimized for operation on single or dual supplies as low as  $2.5 \text{ V} (\pm 1.25 \text{ V})$  and up to  $5.5 \text{ V} (\pm 2.75 \text{ V})$ . Common-mode input range extends beyond the supplies. The output swing is within 100 mV of the rails, supporting wide dynamic range. The single-supply version (OPA354A-Q1) is available in the tiny SOT-23-5 (DBV) package. The dual-supply version (OPA2354A-Q1) is available in the miniature VSSOP-8 (DGK) package and features completely independent circuitry for lowest crosstalk and freedom from interaction. The quad-supply version (OPA4354-Q1) is available in the TSSOP-14 (PW) package. The device specifications are for operation over the automotive temperature range of  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .

### **Key Features**

Qualified for Automotive Applications

AEC-Q100 Qualified With the Following Results:

C3 for OPA4354-Q1

Unity-Gain Bandwidth: 250 MHz

Wide Bandwidth: 100-MHz GBW Product

High Slew Rate: 150 V/µs

Low Noise: 6.5 nV/√

Hz

Rail-to-Rail I/O

High Output Current: >100 mA

Excellent Video Performance

Differential Gain Error: 0.02%

Differential Phase Error: 0.09°

0.1-dB Gain Flatness: 40 MHz

Low Input Bias Current: 3 pA

Quiescent Current: 4.9 mA

Thermal Shutdown

Supply Range: 2.5~V to 5.5~V

#### **Recommended For You**

OPA445BM OPA1611AIDR OPA388QDBVRQ1

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

CAN SOP8 SOT23-5

OPA2365AQDRQ1 OPA334AIDBVR OPA2835IDGSR

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

SOP8 SOT23-6 MSOP10

OPA656U OPA360AIDCKR LM11H/NOPB

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

SOP8 SC70-6 CAN8

OPA353UA

Texas Instruments, Inc

SOP8

LM13700MX/NOPB

Texas Instruments, Inc

SOP16

DIP8

OPA633KP

OPA453FAKTWT

Texas Instruments, Inc

TO263-7

**OPA4251UA** 

Texas Instruments, Inc

SOP14

LMV321M5X/NOPB

Texas Instruments, Inc

Texas Instruments, Inc

SOT23-5