

Video Amp Single 3.3V 6-Pin SC-70 T/R**Manufacturer:** [Texas Instruments, Inc](#)**Package/Case:** SC70-6**Product Type:** Amplifier ICs**RoHS:** RoHS Compliant/Lead free **Lifecycle:** Active

Images are for reference only

[Inquiry](#)**General Description**

The OPA360 high-speed amplifier is optimized for 3V portable video applications. It has been specifically designed to be compatible with digital-to-analog converters (DACs) embedded in video processors, such as Texas Instruments' family of Digital Media Processors and others. The input common-mode range includes GND, which allows the Video-DAC to be DC-coupled to the OPA360.

The output swings within 25mV of GND and 300mV to V+ with a standard back-terminated video load (150). An internal level shift circuit prevents the output from saturating with 0V input, thus preventing sync-pulse clipping in common video circuits. Therefore, the OPA360 is ideally suited for DC-coupling to the video load. If AC-coupling is preferred, the OPA360 offers a sag-correction feature that significantly reduces the size of the output coupling capacitor.

The OPA360 has been optimized for space-sensitive applications by integrating sag-correction, internal gain setting resistors ($G = 2$), and a 2-pole video-DAC reconstruction filter.

In shutdown mode, the quiescent current is reduced to $< 5\mu\text{A}$, dramatically reducing power consumption and prolonging battery life.

The OPA360 is available in the tiny 2mm x 2.1mm SC70-6 package.

Key Features

EXCELLENT VIDEO PERFORMANCE

INTERNAL GAIN: 6dB

2-POLE ANTI-ALIASING FILTER

SAG CORRECTION

Reduces Coupling Capacitor Size

INPUT RANGE INCLUDES GROUND

DC-Coupled Input

INTEGRATED LEVEL SHIFTER

DC-Coupled Output(1)

No Output Capacitors Needed

RAIL-TO-RAIL OUTPUT

LOW QUIESCENT CURRENT: 6mA

SHUTDOWN CURRENT: 5 μ A (max)

SINGLE-SUPPLY: 2.7V to 3.3V

SC70-6 PACKAGE: 2.0mm x 2.1mm

APPLICATIONS

DIGITAL CAMERAS

CAMERA PHONES

SET-TOP-BOX VIDEO FILTERS

(1) Internal circuitry prevents the output from saturating, even with 0V sync tip level at the input video signal. All trademarks are the property of their respective owners.

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

OPA2835IDCSR

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

Texas Instruments, Inc

SOT23-5