


## Op Amp Single High Speed Amplifier $\pm 6V$ 8-Pin SOIC Tube

<b>Manufacturer:</b>	<u>Texas Instruments, Inc</u>
<b>Package/Case:</b>	SOP8
<b>Product Type:</b>	Amplifier ICs
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active



Images are for reference only

[Inquiry](#)

### General Description

The OPA656 device combines a very wideband, unity-gain stable, voltage-feedback operational amplifier with a FET-input stage to offer an ultra high dynamic-range amplifier for Analog-to-Digital Converter (ADC) buffering and transimpedance applications. Extremely low DC errors give good precision in optical applications.

The high unity-gain stable bandwidth and JFET input allows exceptional performance in high-speed, low-noise integrators.

The high input impedance and low bias current provided by the FET input is supported by the ultra-low  $7\text{-nV}/\sqrt{\text{Hz}}$  input voltage noise to achieve a very low integrated noise in wideband photodiode transimpedance applications.

Broad transimpedance bandwidths are achievable given the OPA656 device's high 230-MHz gain bandwidth product. As shown below, a  $-3\text{-dB}$  bandwidth of 1 MHz is provided even for a high  $1\text{-M}\Omega$  transimpedance gain from a  $47\text{-pF}$  source capacitance.

### Key Features

500 MHz Unity-gain Bandwidth

Low Input Bias Current: 2 pA

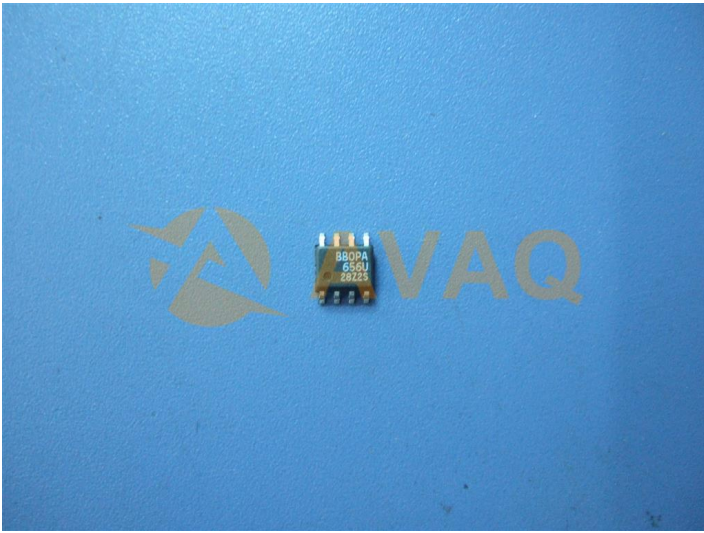
Low Offset And Drift:  $\pm 250\ \mu\text{V}$ ,  $\pm 2\ \mu\text{V}/^\circ\text{C}$

Low Distortion: 74-dB SFDR at 5 MHz

High-Output Current: 70 mA

Low Input Voltage Noise:  $7\ \text{nV}/\sqrt{\text{Hz}}$  input voltage noise to achieve a very low integrated noise in wideband photodiode transimpedance applications.

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## Recommended For You

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### **OPA445BM**

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CAN

### **OPA1611AIDR**

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SOP8

### **OPA388QDBVRQ1**

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### **OPA2365AQDRQ1**

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### **OPA334AIDBVR**

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### **OPA2835IDGSR**

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### **OPA360AIDCKR**

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### **OPA637AU**

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