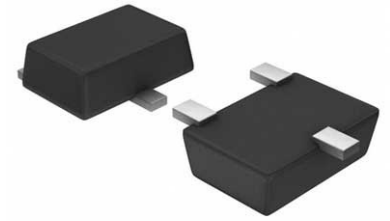


## Op Amp Single Low Noise Amplifier R-R O/P 5.5V 5-Pin SOT-23 T/R



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Texas Instruments, Inc](#)

**Package/Case:** SOT-23-5

**Product Type:** Amplifier ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The LMP7715/LMP7716/LMP7716Q are single and dual low noise, low offset, CMOS input, rail-to-rail output precision amplifiers with high gain bandwidth products. The LMP7715/LMP7716/LMP7716Q are part of the LMP precision amplifier family and are ideal for a variety of instrumentation applications.

Utilizing a CMOS input stage, the LMP7715/LMP7716/LMP7716Q achieve an input bias current of 100 fA, an input referred voltage noise of  $5.8 \text{ nV}/\sqrt{\text{Hz}}$ , and an input offset voltage of less than  $\pm 150 \text{ }\mu\text{V}$ . These features make the LMP7715/LMP7716/LMP7716Q superior choices for precision applications.

Consuming only 1.15 mA of supply current, the LMP7715 offers a high gain bandwidth product of 17 MHz, enabling accurate amplification at high closed loop gains.

The LMP7715/LMP7716/LMP7716Q have a supply voltage range of 1.8V to 5.5V, which makes these ideal choices for portable low power applications with low supply voltage requirements.

The LMP7715/LMP7716/LMP7716Q are built with TI's advanced VIP50 process technology. The LMP7715 is offered in a 5-pin SOT-23 package and the LMP7716/LMP7716Q is offered in an 8-pin VSSOP.

The LMP7716Q incorporates enhanced manufacturing and support processes for the automotive market, including defect detection methodologies. Reliability qualification is compliant with the requirements and temperature grades defined in the AEC-Q100 standard.

## Key Features

Unless Otherwise Noted,  
Typical Values at  $V_S = 5V$ .  
Input Offset Voltage  $\pm 150 \mu V$  (Max)

Input Bias Current 100 fA

Input Voltage Noise  $5.8 \text{ nV}/\sqrt{\text{Hz}}$

Gain Bandwidth Product 17 MHz

Supply Current (LMP7715) 1.15 mA

Supply Current (LMP7716/LMP7716Q) 1.30 mA

Supply Voltage Range 1.8V to 5.5V

THD+N @  $f = 1 \text{ kHz}$  0.001%

Operating Temperature Range  $40^\circ\text{C}$  to  $125^\circ\text{C}$

Rail-to-rail Output Swing

Space Saving SOT-23 Package (LMP7715)

8-Pin VSSOP Package (LMP7716/LMP7716Q)

LMP7716Q is AEC-Q100 Grade 1 Qualified and is Manufactured on an Automotive Grade Flow

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## Recommended For You

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### LMB11MX

Texas Instruments, Inc

SOP8

### LMV7219M5

Texas Instruments, Inc

SOT23-5

### LMB48D

Texas Instruments, Inc

SOP-14

### LM224N

Texas Instruments, Inc

DIP14

### LM239J

Texas Instruments, Inc

CDIP14

### LMV331M5

Texas Instruments, Inc

SOT23-5

### LMB93ADR

Texas Instruments, Inc

SOP8

### LM293DR

Texas Instruments, Inc

SOP8

### LM293D

Texas Instruments, Inc

SOP8

### LMV824MIX

Texas Instruments, Inc

TSSOP

### LMV358M

Texas Instruments, Inc

SOP8

### LMV321M5

Texas Instruments, Inc

SOT23-5

**LM741H**

Texas Instruments, Inc

CAN8

**LMI93AH**

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CAN8

**LMI11H/NOPB**

Texas Instruments, Inc

CAN8