

Analog Multiplier 4Bit 8-Pin SOIC N Tube

Manufacturer: Analog Devices, Inc

Package/Case: SOP8

Product Type: Amplifier ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The AD633 is laser calibrated to a guaranteed total accuracy of 2% of full scale. Nonlinearity for the Y input is typically less than 0.1% and noise referred to the output is typically less than 100 μ V rms in a 10 Hz to 10 kHz bandwidth. A 1 MHz bandwidth, 20 V/ μ s slew rate, and the ability to drive capacitive loads make the AD633 useful in a wide variety of applications where simplicity and cost are key concerns.

The versatility of the AD633 is not compromised by its simplicity. The Z input provides access to the output buffer amplifier, enabling the user to sum the outputs of two or more multipliers, increase the multiplier gain, convert the output voltage to a current, and configure a variety of applications.

The AD633 is available in 8-lead PDIP and SOIC packages. It is specified to operate over the 0° C to 70° C commercial temperature range (J Grade) or the -40° C to $+85^{\circ}$ C industrial temperature range (A Grade).

Product Highlights

The AD633 is a complete four-quadrant multiplier offered in low cost 8-lead SOIC and PDIP packages. The result is a product that is cost effective and easy to apply.

No external components or expensive user calibration are required to apply the AD633.

Monolithic construction and laser calibration make the device stable and reliable.

High (10 M Ω) input resistances make signal source loading negligible.

Power supply voltages can range from $\pm 8~V$ to $\pm 18~V$. The internal scaling voltage is generated by a stable Zener diode; multiplier accuracy is essentially supply insensitive.

Applications

Multiplication, division, squaring

Modulation/demodulation, phase detection

Voltage-controlled amplifiers/attenuators/filters

Key Features

4-quadrant multiplication

Complete - No external components required

Laser-trimmed accuracy and stability

Total error within 2% of full scale

Differential high impedance X and Y inputs

High impedance unity-gain summing input

Laser-trimmed 10V scaling reference

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Recommended For You

Analog Devices, Inc

TSSOP16

AD8221ARZ

Analog Devices, Inc

SOP8

ADA4930-2YCPZ-R7

Analog Devices, Inc

LFCSP24

AD633JRZ

Analog Devices, Inc

SOP8

ADCMP600BKSZ-R2

Analog Devices, Inc

SC70-5

AD524BDZ

Analog Devices, Inc

CDIP-16

AD627BRZ

Analog Devices, Inc

SOP8

AD8034ARZ

Analog Devices, Inc

SOP8

AD632AH

Analog Devices, Inc

CAN10

AD620BN

Analog Devices, Inc

DIP8

AD8221BR

Analog Devices, Inc

SOP-8

AD622ANZ

Analog Devices, Inc

DIP8

AD8561ARZ

Analog Devices, Inc

SOP8

AD8422BRZ

Analog Devices, Inc

SOP8

AD620BR

Analog Devices, Inc

SOP