

# AD632AH

#### Analog Multiplier/Divider 4Bit 10-Pin TO-100 Tube

Manufacturer:	Analog Devices, Inc.
Package/Case:	CAN10
Product Type:	Amplifier ICs
Lifecycle:	Obsolete



Images are for reference only



#### **General Description**

The AD632 is an internally trimmed monolithic four-quadrant multiplier/divider. The AD632B has a maximum multiplying error of  $\pm 0.5\%$  without external trims.

Excellent supply rejection, low temperature coefficients and long term stability of the on-chip thin film resistors and buried zener reference preserve accuracy even under adverse conditions. The simplicity and flexibility of use provide an attractive alternative approach to the solution of complex control functions. The AD632 is pin-for-pin compatible with the industry standard AD532 with improved specifications and a fully differential high impedance Z-input. The AD632 is capable of providing gains of up to X10, frequently eliminating the need for separate instrumentation amplifiers to precondition the inputs. The AD632 can be effectively employed as a variable gain differential inputamplifier with high common-mode rejection. The effectiveness of the variable gain capability is enhanced by the inherent low noise of the AD632: 90 µV rms. Product Highlights

Guaranteed performance over temperature.

The AD632A and AD632B are specified for maximum multiplying errors of  $\pm 1.0\%$  and  $\pm 0.5\%$  of full scale, respectively, at  $\pm 25^{\circ}$ C and are rated for operation from  $\pm 25^{\circ}$ C to  $\pm 85^{\circ}$ C.

Maximum multiplying errors of  $\pm 2.0\%$  (AD632S) and  $\pm 1.0\%$  (AD632T) are guaranteed over the extended temperature range of  $-55^{\circ}$ C to  $+125^{\circ}$ C. High reliability.

The AD632S and AD632T series are available with MIL-STD-883 Level B screening.

All devices are available in either the hermetically sealed TO-100 metal can or ceramic DIP package.

#### **Key Features**

All Inputs (X, Y and Z) Differential, High Impedance for [(X1 - X2) (Y1 - Y2)/10] + Z2 Transfer Function High quality analog signal processing

Scale-Factor Adjustable to Provide up to X10 Gain

Pretrimmed to  $\pm 0.5\%$  Max 4-Quadrant Error

Low Noise, Design: 90 µV rms, 10 Hz-10 kHz

Low Cost, Monolithic Construction

Excellent Long-Term Stability

#### Application

Differential ratio and percentage computations

Algebraic and trigonometric function synthesis

Accurate voltage controlled oscillators and filters



# **Recommended For You**

AD8309ARUZ Analog Devices, Inc TSSOP16

AD8221ARZ Analog Devices, Inc SOP8

## ADA4930-2YCPZ-R7

Analog Devices, Inc

LFCSP24

AD633JRZ Analog Devices, Inc

SOP8

AD620BN Analog Devices, Inc DIP8

# AD524BDZ Analog Devices, Inc CDIP-16

AD627BRZ Analog Devices, Inc SOP8

AD8034ARZ Analog Devices, Inc SOP8

AD8422BRZ Analog Devices, Inc SOP8

AD620BR Analog Devices, Inc SOP AD8221BR Analog Devices, Inc SOP-8

AD622ANZ

Analog Devices, Inc DIP8

AD8561ARZ Analog Devices, Inc SOP8

## ADCMP600BKSZ-R2

Analog Devices, Inc SC70-5

AD204JY Analog Devices, Inc DIP