

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

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



Images are for reference only

[Inquiry](#)

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 input amplifier with high common-mode rejection. The effectiveness of the variable gain capability is enhanced by the inherent low noise of the AD632: 90 $\mu\text{V rms}$.

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 $+25^\circ\text{C}$ and are rated for operation from -25°C to $+85^\circ\text{C}$.

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

High reliability.

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

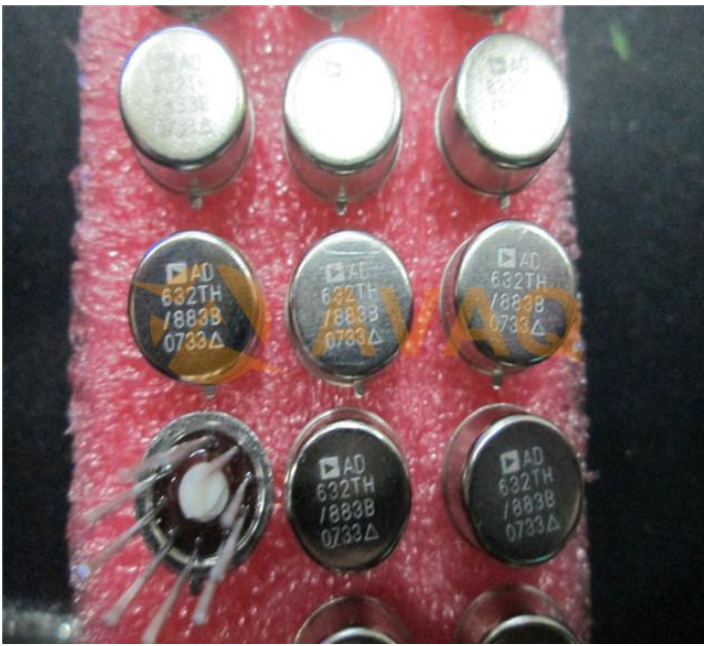
All devices are available in either the hermetically sealed TO-100 metal can or ceramic DIP package.

Key Features

- All Inputs (X, Y and Z) Differential, High Impedance for $[(X1 - X2)(Y1 - Y2)/10] + Z2$ Transfer Function
- Scale-Factor Adjustable to Provide up to X10 Gain
- Pretrimmed to $\pm 0.5\%$ Max 4-Quadrant Error
- Low Noise, Design: 90 $\mu\text{V rms}$, 10 Hz-10 kHz
- Low Cost, Monolithic Construction
- Excellent Long-Term Stability

Application

- High quality analog signal processing
- Differential ratio and percentage computations
- Algebraic and trigonometric function synthesis
- Accurate voltage controlled oscillators and filters



Recommended For You

AD632SH

Analog Devices, Inc

CAN10

AD834AQ

Analog Devices, Inc

CDIP8

AD632TH

Analog Devices, Inc

CAN

AD734AN

Analog Devices, Inc

DIP

AD734BN

Analog Devices, Inc

DIP14

AD734BNZ

Analog Devices, Inc

DIP14

AD734ANZ

Analog Devices, Inc

DIP14

AD835AR

Analog Devices, Inc

SOP8

AD734AQ

Analog Devices, Inc

DIP

AD734BQ

Analog Devices, Inc

CDIP

AD9500BP

Analog Devices, Inc

PLCC

AD632AD

Analog Devices, Inc

AUDIP

AD835ARZ

Analog Devices, Inc

SOP8

AD632ADZ

Analog Devices, Inc

14-CDIP

AD835AN

Analog Devices, Inc

DIP