

Voltage Reference, Ultralow Noise, High Accuracy, Series - Fixed, ADR4533 Series, 3.3V, NSOIC-8

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	SOIC-8
Product Type	Power Management ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for ADR4533BRZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ADR4520/ADR4525/ADR4530/ADR4533/ADR4540/ADR4550 devices are high precision, low power, low noise voltage references featuring  $\pm 0.02\%$  B, C, and D grade maximum initial error, excellent temperature stability, and low output noise.

This family of voltage references uses an innovative core topology to achieve high accuracy while offering industry-leading temperature stability and noise performance. The low, thermally induced output voltage hysteresis and low long-term output voltage drift of the devices also improve system accuracy overtime and temperature variations.

A maximum operating current of 950  $\mu\text{A}$  and a maximum low dropout voltage of 300 mV allow the devices to function very well in portable equipment.

The ADR4520/ADR4525/ADR4530/ADR4533/ADR4540/ADR4550 series of references are each provided in an 8-lead SOIC and are available in a wide range of output voltages, all of which are specified over the extended industrial temperature range of  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .

## APPLICATIONS

### Features

Maximum temperature coefficient (TCV

OUT

0.8 ppm/ $^{\circ}\text{C}$  (D grade  $0^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ )

1 ppm/ $^{\circ}\text{C}$  (C grade  $0^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ )

2 ppm/ $^{\circ}\text{C}$  (B grade  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ )

4 ppm/ $^{\circ}\text{C}$  (A grade  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ )

### Application

Precision data acquisition systems

High resolution data converters

High precision measurement devices

Industrial instrumentation

Medical devices

Automotive battery monitoring

Output noise (0.1 Hz to 10 Hz):

1  $\mu\text{V}$  p-p at V

OUT

Initial output voltage error:

B, C, D grade:  $\pm 0.02\%$  (maximum)

Input voltage range: 3 V to 15 V

0.8 ppm/ $^{\circ}\text{C}$  (D grade  $0^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ )

1 ppm/ $^{\circ}\text{C}$  (C grade  $0^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ )

2 ppm/ $^{\circ}\text{C}$  (B grade  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ )

4 ppm/ $^{\circ}\text{C}$  (A grade  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ )

B, C, D grade:  $\pm 0.02\%$  (maximum)

Operating temperature:

A grade and B grade:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

C grade:  $0^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$

Output current: +10 mA source/ $-10$  mA sink

Low quiescent current: 950  $\mu\text{A}$  (maximum)

Low dropout voltage: 300 mV at 2 mA (V

OUT

8-lead SOIC package and LCC package

AEC-Q100 qualified for automotive applications

Long-term drift: 8 ppm typical at 4500 hours

A grade and B grade:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

C grade:  $0^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$

## Related Products



[ADP3336ARMZ-REEL7](#)

Analog Devices, Inc  
MSOP-8



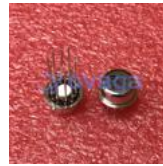
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TO-100-10



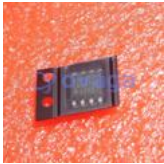
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