

# ADR4540ARZ

. 500

Data Sheet

RFO

Voltage Reference, Ultralow Noise, High Accuracy, Series - Fixed, ADR4540 Series, 4.096V, NSOIC-8

Manufacturers	Analog Devices, Inc	E.E.
Package/Case	SOIC-8	E
Product Type	Power Management ICs	EFE
RoHS	Rohs	
Lifecycle		Images are for reference only

**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.

Please submit RFQ for ADR4540ARZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

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 µA 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  $-40^{\circ}$ C to  $+125^{\circ}$ C.

### APPLICATIONS

# FeaturesApplicationMaximum temperature coefficient (TCVPrecision data acquisition systemsOUTHigh resolution data converters0.8 ppm/°C (D grade 0°C to 70°C)High precision measurement devices1 ppm/°C (C grade 0°C to 70°C)Industrial instrumentation2 ppm/°C (B grade -40°C to +125°C)Medical devices4 npm/°C (A grade -40°C to +125°C)Automotive battery monitoring

**Ovaga Technologies Limited** 

Output noise (0.1 Hz to 10 Hz):

 $1~\mu V$  p-p at V

OUT

Initial output voltage error:

B, C, D grade: ±0.02% (maximum)

Input voltage range: 3 V to 15 V

- $0.8 \text{ ppm/}^{\circ}\text{C}$  (D grade  $0^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ )
- 1 ppm/°C (C grade 0°C to 70°C)
- 2 ppm/°C (B grade  $-40^{\circ}$ C to  $+125^{\circ}$ C)
- 4 ppm/°C (A grade  $-40^{\circ}$ C to  $+125^{\circ}$ C)
- B, C, D grade: ±0.02% (maximum)

Operating temperature:

A grade and B grade: -40°C to +125°C

C grade: 0°C to +70°C

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

Low quiescent current: 950 µA (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°C to +125°C

C grade: 0°C to +70°C

### **Related Products**



ADP3336ARMZ-REEL7 Analog Devices, Inc MSOP-8



### <u>AD737JRZ</u>

Analog Devices, Inc SOP-8



# ADP3367ARZ

Analog Devices, Inc SOIC-8



# ADP3330ARTZ3.3-RL7

Analog Devices, Inc SOT-23-6



# ADR421ARZ

Analog Devices, Inc SOP-8







# <u>AD636JH</u>

Analog Devices, Inc TO-100-10

# ADR434BRZ

Analog Devices, Inc SOIC-8

## ADR3412ARJZ-R7

Analog Devices, Inc SOT-23-6