

Voltage Reference Series - Fixed, 10V reference, 3ppm/°C, DIP-16

Manufacturers	Analog Devices, Inc
Package/Case	CDIP-16
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for AD688AQ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD688 is a high precision ± 10 V tracking reference. Low tracking error, low initial error and low temperature drift give the AD688 reference absolute ± 10 V accuracy performance previously unavailable in monolithic form. The AD688 uses a proprietary ion-implanted buried Zener diode, and laser-wafer-drift-trimming of high stability thin-film resistors to provide outstanding performance at low cost.

The AD688 includes the basic reference cell and three additional amplifiers. The amplifiers are laser-trimmed for low offset and low drift and maintain the accuracy of the reference. The amplifiers are configured to allow Kelvin connections to the load and/or boosters for driving long lines or high current loads, delivering the full accuracy of the AD688 where it is required in the application circuit.

The low initial error allows the AD688 to be used as a system reference in precision measurement applications requiring 12-bit absolute accuracy. In such systems, the AD688 can provide a known voltage for system calibration and the cost of periodic recalibration can therefore be eliminated. Furthermore, the mechanical instability of a trimming potentiometer and the potential for improper calibration can be eliminated by using the AD688 and calibration software.

The AD688 is available in three versions. The AD688AQ and BQ grades are packaged in 16-pin cerdip (0.3") packages and are specified for operation from -40°C to $+85^{\circ}\text{C}$. The AD688SQ grade is specified for operation from -55°C to $+125^{\circ}\text{C}$.

Features

Kelvin connections

Low tracking error: 1.5 mV

Low initial error: 2.0 mV

Low drift: 1.5 ppm/°C

Low noise: 6 μ V p-p

Flexible output force and sense terminals

High impedance ground sense

Wide body SOIC and CERDIP packages



Related Products



[ADP3336ARMZ-REEL7](#)

Analog Devices, Inc
MSOP-8



[AD737JRZ](#)

Analog Devices, Inc
SOP-8



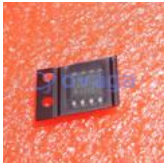
[ADP3367ARZ](#)

Analog Devices, Inc
SOIC-8



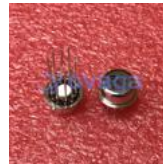
[ADP3330ARTZ3.3-RL7](#)

Analog Devices, Inc
SOT-23-6



[ADR421ARZ](#)

Analog Devices, Inc
SOP-8



[AD636JH](#)

Analog Devices, Inc
TO-100-10



[ADR434BRZ](#)

Analog Devices, Inc
SOIC-8



[ADR3412ARJZ-R7](#)

Analog Devices, Inc
SOT-23-6