AD587JRZ

V-Ref Precision 10V 10mA 8-Pin SOIC N Tube

Manufacturer:	Analog Devices, Inc
Package/Case:	SOP8
Product Type:	Power Management ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

Images are for reference only

Inquiry

General Description

The AD587 represents a major advance in state-of-the-art monolithic voltage references. Using a proprietary ion-implanted buried Zener diode and laser wafer trimming of high stability thin-film resistors, the AD587 provides outstanding performance at low cost.

The AD587 offers much higher performance than most other 10 V references. Because the AD587 uses an industry-standard pinout, many systems can be upgraded instantly with the AD587.

The buried Zener approach to reference design provides lower noise and drift than band gap voltage references. The AD587 offers a noise-reduction pin that can be used to further reduce the noise level generated by the buried Zener.

The AD587 is recommended for use as a reference for 8-bit, 10-bit, 12-bit, 14-bit, or 16-bit DACs that require an external precision reference. The device is also ideal for successive approximation or integrating ADCs with up to 14 bits of accuracy. In general, it offers better performance than standard on-chip references.

The AD587J and AD587K are specified for operation from 0°C to 70°C, and the AD587U is specified for operation from −55°C to +125°C. The AD587JQ and AD587UQ models are available in 8-lead CERDIP. Other models are available in an 8-lead SOIC package for surface-mount applications, or in an 8-lead PDIP.

Product Highlights

Laser trimming of both initial accuracy and temperature coefficients. This laser trimming results in very low errors over temperature without the use of external components. The AD587U guarantees ±14 mV maximum total error between −55°C and +125°C.

Optional fine trim connection. This connection is designed for applications requiring higher precision.

Instant upgrade of any system using an industry-standard pinout 10 V reference.

Very low output noise. AD587 output noise is typically 4 µV p-p. A noise-reduction pin is provided for additional noise filtering using an external capacitor.

MIL-STD-883-compliant versions available. Refer to the Analog Devices Military/Aerospace Reference Manual for detailed specifications.

Key Features

Noise-reduction capability

Output trim capability

4mA Maximum low quiescent current

Recommended For You

ADP196ACPZN-R7

Analog Devices, Inc

LFCSP-6

ADP191ACBZ-R7

Analog Devices, Inc

WLCSP4

AD581LH

Analog Devices, Inc

CAN3

AD1583BRTZ-REEL7

Analog Devices, Inc

SOT-23

ADL5315ACPZ-R7

Analog Devices, Inc

LFCSP8

ADP5023ACPZ-R7

Analog Devices, Inc

LFCSP-24

ADR01TUJZ-EP-R7

Analog Devices, Inc

5-LeadTSOT

AD581KH

Analog Devices, Inc

CAN3

AD780BRZ

Analog Devices, Inc

SOP8

AD580SH

Analog Devices, Inc

CAN3

ADM660ARZ

Analog Devices, Inc

SOP8

ADM660ARZ-REEL7

Analog Devices, Inc

SOP8

ADP1612ARMZ-R7

Analog Devices, Inc

MSOP8

ADR444BRZ

Analog Devices, Inc

SOP8

AD589JH

Analog Devices, Inc

CAN