

AD1584BRTZ-REEL7

V-Ref Precision 4.096V 5mA 3-Pin SOT-23 T/R

Manufacturer: Analog Devices, Inc

Package/Case: SOT23-3

Product Type: Power Management ICs

RoHS Compliant/Lead free RoHS:

Lifecycle: Active



Images are for reference only

General Description

The AD1582/AD1583/AD1584/AD1585 are low cost, low power, low dropout, precision band gap references. These designs are available as 3-terminal (series) devices and are packaged in the compact SOT-23, 3-lead surface-mount package. The versatility of these references makes them ideal for use in battery-powered 3 V or 5 V systems where there can be wide variations in supply voltage and a need to minimize power dissipation.

The superior accuracy and temperature stability of the AD1582/AD1583/AD1584/AD1585 result from the precise matching and thermal tracking of on-chip components. Patented temperature drift curvature correction design techniques minimize the nonlinearities in the voltage output temperature characteristic. The AD1582/AD1583/AD1584/AD1585 series mode devices source or sink up to 5 mA of load current and operate efficiently with only 200 mV of required headroom supply. These parts draw a maximum 70 µA of quiescent current with only a 1.0 µA/V variation with supply voltage. The advantage of these designs over conventional shunt devices is extraordinary. Valuable supply current is no longer wasted through an input series resistor, and maximum power efficiency is achieved at all input voltage levels.

The AD1582/AD1583/AD1584/AD1585 are available in two grades, A and B, and are provided in a tiny footprint, the SOT-23. All grades are specified over the industrial temperature range of -40°C to +125°C.

Key Features Application

Series reference (2.5 V, 3 V, 4.096 V, 5 V) Portable, battery-powered equipment; for example, notebook computers, cellular phones, pagers, PDAs, GPSs,

and DMMs Low quiescent current: 70 µA maximum

Computer workstations; suitable for use with a wide range of video RAMDACs Current output capability: ±5 mA

Wide supply range:> Smart industrial transmitters

Wideband noise (10 Hz to 10 kHz): 50 µV

PCMCIA cards

Specified temperature range: -40°C to

Automotive

Compact, surface-mount SOT-23 package

Hard disk drives

Qualified for automotive applications 3 V/5 V, 8-bit/12-bit data converters

Recommended For You

ADP196ACPZN-R7

Analog Devices, Inc

LFCSP-6

AD1583BRTZ-REEL7

Analog Devices, Inc

SOT-23

ADR01TUJZ-EP-R7

Analog Devices, Inc

5-LeadTSOT

AD580SH

Analog Devices, Inc

CAN3

ADP1612ARMZ-R7

Analog Devices, Inc

MSOP8

ADP191ACBZ-R7

Analog Devices, Inc

WLCSP4

ADL5315ACPZ-R7

Analog Devices, Inc

LFCSP8

AD581KH

Analog Devices, Inc

CAN3

ADM660ARZ

Analog Devices, Inc

SOP8

ADR444BRZ

Analog Devices, Inc

SOP8

AD581LH

Analog Devices, Inc

CAN3

ADP5023ACPZ-R7

Analog Devices, Inc

LFCSP-24

AD780BRZ

Analog Devices, Inc

SOP8

ADM660ARZ-REEL7

Analog Devices, Inc

SOP8

AD589JH

Analog Devices, Inc

CAN