TL1431CD

V-Ref Adjustable 2.5V to 36V 100mA 8-Pin SOIC Tube

Manufacturer:	Texas Instruments, 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 TL1431 device is a precision programmable reference with specified thermal stability over automotive, commercial, and military temperature ranges. The output voltage can be set to any value between $V_{I(ref)}$ (approximately 2.5 V) and 36 V with two external resistors. This device has a typical output impedance of 0.2 Ω. Active output circuitry provides a sharp turnon characteristic, making the device an excellent replacement for Zener diodes and other types of references in applications such as onboard regulation, adjustable power supplies, and switching power supplies.

The TL1431C is characterized for operation over the commercial temperature range of 0°C to 70°C. The TL1431Q is characterized for operation over the full automotive temperature range of –40°C to 125°C. The TL1431M is characterized for operation over the full military temperature range of –55°C to 125°C.

Key Features

0.4% Initial Voltage Tolerance

0.2-Ω Typical Output Impedance

Fast Turnon (500 ns)

Sink Current Capability (1 mA to 100 mA)

Low Reference Current (REF)

Adjustable Output Voltage ($V_{I(ref)}$ to 36 V)

Recommended For You

TL2843P

Texas Instruments, Inc

DIP8

TL431CP

Texas Instruments, Inc

DIP8

TL7705ACDR

Texas Instruments, Inc

SOP8

TL3843P

Texas Instruments, Inc

DIP8

TL497ACN

Texas Instruments, Inc

DIP14

TL3845P

Texas Instruments, Inc

DIP8

TL494CD

Texas Instruments, Inc

SOP-16

TL4311DBVR

Texas Instruments, Inc

SOT23-5

TL494CN

Texas Instruments, Inc

DIP

TL431CDBVR

Texas Instruments, Inc

SOT23-5

TL7705ACP

Texas Instruments, Inc

DIP8

TL3842P

Texas Instruments, Inc

DIP8

TLV73325PDBVT

Texas Instruments, Inc

SOT23-5

TLV73333PDBVR

Texas Instruments, Inc

SOT23-5

TL431BIDBZT

Texas Instruments, Inc

SOT23-3