

## Product Overview

### KA431A: Adjustable/2.5V, 1% Tolerance Shunt Regulator

For complete documentation, see the data sheet.

The KA431 / KA431A / KA431L are three-terminal adjustable regulators with a guaranteed thermal stability over the operating temperature ranges. The output voltage may be set to any value between  $V_{REF}$  (approximately 2.5V) and 36V with two external resistors. These devices have a typical dynamic output impedance of  $0.2 \Omega$ . Active output circuitry provides a very sharp turn-on characteristic, making these devices excellent replacements for Zener diodes in many applications.

### Features

- Programmable output voltage to 36 V
- Low dynamic output impedance  $0.2 \Omega$  (Typical)
- Sink current capability of 1.0 to 100 mA
- Equivalent full-range temperature coefficient of 50 ppm/°C (Typical)
- Temperature compensated for operation over full rated operating temperature range
- Low output noise voltage
- Fast turn-on response

### Applications

- This product is general usage and suitable for many different applications.

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Type	$V_{(BR)}$ Typ (V)	Tolerance (%)	$I_O$ Typ (mA)	$I_R$ Min (mA)	$V_F$ Max (V)	$T_A$ Min (°C)	$T_A$ Max (°C)	Package Type
KA431AZBU	0.0451	Pb-free non AEC-Q and PPAP	Active	Adjustable	2.5	1	0.004	0.45	36	-25	85	TO-92-3
KA431AZTA	0.0489	Pb-free non AEC-Q and PPAP	Active	Adjustable	2.5	1	0.004	0.45	36	-25	85	TO-92-3 LF

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