

RS431

Adjustable Precision Shunt Regulator

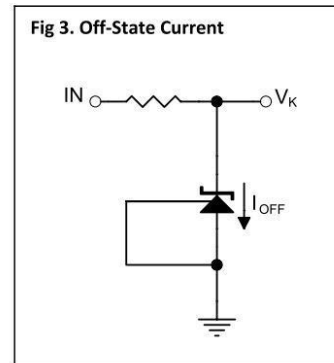
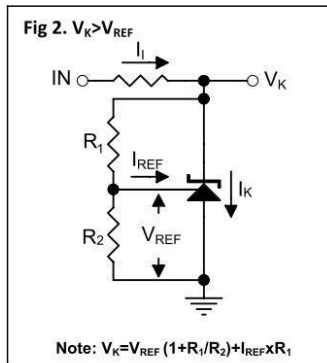
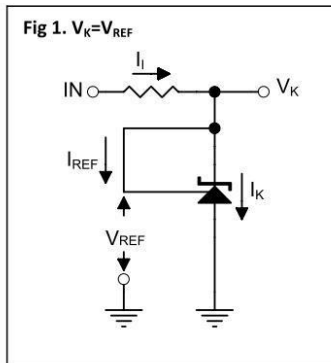
General Description

The RS431 series are three-terminal adjustable regulators with guaranteed thermal stability over applicable temperature ranges. The output voltage may be set to any value between V_{REF} (approximately 2.5 volts) and 36 volts with two external resistors. These devices have a typical dynamic output impedance of 0.2Ω . Active output circuitry provides a very sharp turn-on characteristic, making these devices excellent replacement for zener diodes in many applications.

Features

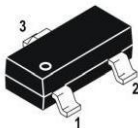
- Programmable Precise Output Voltage from 2.5V to 36V
- High Stability under Capacitive Load
- Low Temperature Deviation: 4.5mV Typical
- Low Dynamic Output Resistance: 0.2Ω Typical
- Sink Current Capacity from 1mA to 100mA
- Low Output Noise
- Wide Operating Range of -40 to 125°C
- Low Equivalent Full-range Temperature Coefficient with 20PPM/ $^\circ\text{C}$ Typical

Application Circuits



Pin Assignments

SOT-23



PACKAGE	PIN	DESCRIPTION
SOT-23	1	REFERENCE
	2	CATHODE
	3	ANODE