

# ADJUSTABLE PRECISION SHUNT REGULATORS

## FEATURES

- **Reference Voltage High Accuracy at 25°C:**
  - 0.4% B Grade
  - 0.8% A Grade
- **Programmable Precise Output Voltage:**
  - TS431H/TS432H 2.5V to 36V
- **Low Temperature Deviation: 4.5mV (Typ)**
- **Equivalent Full-Range Temperature Coefficient with 20ppm/°C (Typ)**
- **Low Output Noise**
- **Sink Current Capability: 1mA to 100mA**
- **Typical Output Impedance: 0.2Ω**
- **High Stability under Capacitive Load**
- **Operation Junction Temperature: -40°C to +125°C**
- **SOT-23-G Package**

## APPLICATIONS

- Precision Voltage Reference
- High Current Shunt Regulator
- Power Converter/Inverter
- Charger

## PRODUCT DESCRIPTION

The TS431H/TS432H series ICs are three-terminal adjustable shunt regulators offering excellent temperature stability.

The output voltage can be programmable to any voltage between Vref (2.5V) and the corresponding maximum cathode voltage by two external resistors. The TS431H/TS432H maximum output voltage is 36V.

The TS431H/TS432H precision reference series provide 0.4% and 0.8% initial accuracy grades. These devices have a typical output impedance of 0.2Ω. Active output circuitry provides a very sharp turn on characteristic, making these devices excellent replacements for zener diodes in many applications, such as onboard regulation, adjustable power supplies, and switching power supplies.

