High Temperature Voltage Regulators

CHT-LDO

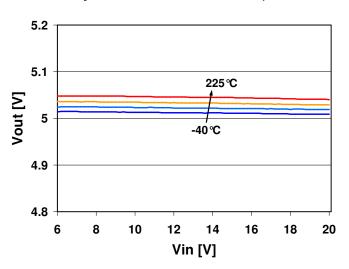
Low-Dropout Positive Voltage Regulators

This family of positive 1Amp low-dropout voltage regulators not only operates at the specified temperature range from -55°C to 225°C, but can even operate at up to 300°C.

This SOI circuit, specifically designed for harsh environments, provides constant stability throughout the entire temperature range under a wide range of capacitive loads. SOI technology combined with a one-die solution and tungsten high-temperature metallization make this circuit the most cost-effective and reliable solution for long-term operation at extreme temperatures.



Line Regulation versus Temperature



Output Voltage

Programmable to 2.5V, 3.3V, 5.0V, 5.5V, 9.0V, 10V, 12V, 13V or 15V

Packaging Options

- Standard: TO-254 3-pin package
- On request: Die or TO-3, TO-254 4-pin (with standby option) and TO-257 packages

Features

- Specified operating range from -55°C to +225°C
- SOI Technology (latch-up free)
- Special on-chip (tungsten) interconnections for long-term reliability at high temperatures
- 1V to 20V dropout voltage
- 1Amp output current at 225°C
- 60dB input ripple rejection
- Optimal stability for loads from 100nF to $1000\mu F$ and wide ESR range
- Standby mode available (4-pin package)
- Short-circuit protection
- Start-up throughout the entire temperature range
- 2% accuracy from -55°C to +225°C (absolute + T° drift)

Applications

- Oil & Gas
- Aeronautics & Space
- Automotive
- Industrial



www.cissoid.com