



# LNB Power Supply and Control Voltage Regulator

Parameters Subject to Change Without Notice

#### DESCRIPTION

JW<sup>®</sup>4002 is a monolithic linear and switching voltage regulator, specially designed to provide efficient, low noise power to Satellite receiver's RF LNB (Low Noise Block) converter via coaxial cable.

The JW4002 integrates a current mode boost converter followed by a tracking linear regulator. A high switching frequency is chosen to minimize the size of passive filtering components, further assisting in cost reduction. The tracking linear regulator protects the output against overload or short circuit.

The JW4002 provides a number of features described in DiSEqC. For DiSEqC communications, the 22 KHz tone signal can be generated from external clock, all the way down to no-load.

JW4002 is available in ESOP8 packages.

Company's Logo is Protected, "JW" and "JOULWATT" are Registered Trademarks of JoulWatt technology Inc.

#### **FEATURES**

- DiSEqC 1.x Compatibility
- Up to 550mA Continuous Output Current
- 8V to 14V Input Voltage
- Tracking Switch-Mode Power Converter for Lowest Power Dissipation, High Efficiency
- Boost Converter with Internal Switch
- Low Noise Linear Regulator Output
- 1V Line Drop Compensation
- External Input 22KHz Tone
- Output Short Circuit Robust
- Input Voltage UVLO Protection
- Over Temperature Protection

## **APPLICATIONS**

 LNB Power Supply and Control for Satellite Set-Top Boxes

### TYPICAL APPLICATION

