

**10 Gb/s
 Modulator Driver**
**MTC5515
 Product Data Sheet**
Applications

- Driver for LiNbO₃ modulator in high bit-rate SONET/SDH transmission systems
- Medium power linear gain block for broadband applications

Features

- 23 dB typical gain
- Output voltage up to 8V_{PP}
- Low gain ripple, 1.5 dB_{PP} typical
- 30 KHz to 11 GHz bandwidth


Description

The MTC5515 is a precision GaAs medium power amplifier. It operates from 30 KHz to 11 GHz and exhibits a flat linear gain response. The MTC5515 has low internal jitter making it useful for digital applications. The self-contained module operates from a +8V and a -5V power supply. It is fully hermetic, consumes 5 W of power and operates over a case temperature range from 0°C to +70°C.

With an input voltage of 0.8V_{PP}, the typical output is 7.5 V_{P-P}. Low jitter and large amplitude output makes the MTC5515 an attractive component for driving LiNbO₃ in applications where a high extinction ratio is required. For convenience, the output voltage can be varied from 5V to 7.5 V_{PP} by adjusting the voltage on the +V pin. By applying a DC voltage to the BIAS pin, an offset voltage can be added to the output signal via a 1 kΩ internal resistance.

