



LM1596/LM1496 Balanced Modulator-Demodulator

General Description

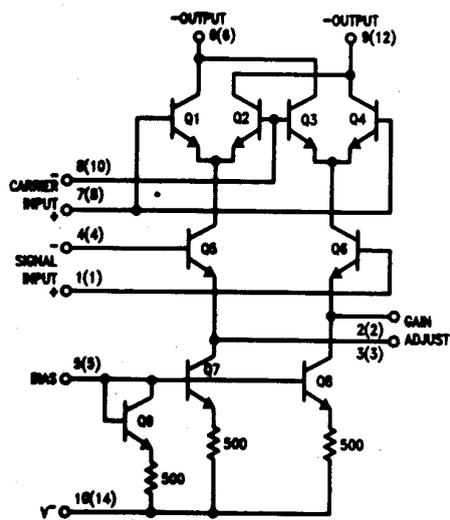
The LM1596/LM1496 are doubled balanced modulator-demodulators which produce an output voltage proportional to the product of an input (signal) voltage and a switching (carrier) signal. Typical applications include suppressed carrier modulation, amplitude modulation, synchronous detection, FM or PM detection, broadband frequency doubling and chopping.

The LM1596 is specified for operation over the -55°C to $+125^{\circ}\text{C}$ military temperature range. The LM1496 is specified for operation over the 0°C to $+70^{\circ}\text{C}$ temperature range.

Features

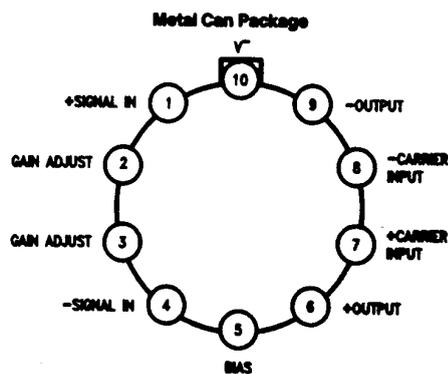
- Excellent carrier suppression
65 dB typical at 0.5 MHz
50 dB typical at 10 MHz
- Adjustable gain and signal handling
- Fully balanced inputs and outputs
- Low offset and drift
- Wide frequency response up to 100 MHz

Schematic and Connection Diagrams



TL/H/7887-1

Numbers in parentheses show DIP connections.

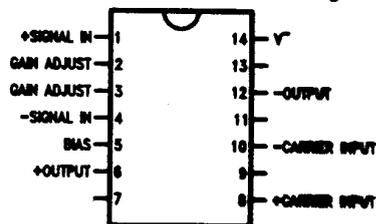


TL/H/7887-2

Top View

Note: Pin 10 is connected electrically to the case through the device substrate.
Order Number LM1496H or LM1596H
See NS Package Number H00C

Dual-In-Line and Small Outline Packages



TL/H/7887-3

Order Number LM1496N or LM1596N
See NS Package Number M14A or N14A

LM1596/LM1496