

## LND-SA55/56

# **Pulse Width Modulated Amplifier**

### **FEATURES**

- DELIVERS UP TO 5A CONTINUOUS OUTPUT
- OPERATES AT SUPPLY VOLTAGES UP TO 60V
- TTL AND CMOS COMPATIBLE INPUTS
- NO "SHOOT-THROUGH" CURRENT
- THERMAL SHUTDOWN (OUTPUTS OFF) AT 160°C
- SHORTED LOAD PROTECTION (to VS or PGND or SHORTED LOAD)
- NO BOOTSTRAP CAPACITORS REQUIRED
- PROGRAMMABLE ONBOARD PWM

### APPLICATIONS

- DC MOTOR DRIVES
- POSITION AND VELOCITY SERVOMECHANISMS
- FACTORY AUTOMATION ROBOTS
- NUMERICALLY CONTROLLED MACHINERY
- COMPUTER PRINTERS AND PLOTTERS
- AUDIO AMPLIFICATION



23 PIN SIP PACKAGE STYLE EX

#### DESCRIPTION

The SA56 is a 5A PWM Amplifier designed for motion control applications. The device is built using a multi-technology process which combines bipolar and CMOS control circuitry with DMOS power devices in the same monolithic structure. Ideal for driving DC and stepper motors; the SA56 accommodates peak output currents up to 10A. An innovative circuit which facilitates low-loss sensing of the output current has been implemented. On board PWM oscillator and comparator are used to convert an analog signal into PWM direction and magnitude for motor control applications, or to amplify audio signals using class D amplification.

# FIGURE 1. BLOCK DIAGRAM

