

## DESCRIPTION

The SSI 33R3752 is a BiCMOS monolithic integrated circuit designed for driving high current, magneto-optical write coils. The device provides a one channel, rail-to-rail, + 5 volt write driver; voltage fault, write transition, no write current and open head detection circuitry, and an open collector write unsafe WUS output. The device requires +5 V and comes in a 20-Pin VSOP package.

## FEATURES

- **+5 V  $\pm 10\%$  supply**
- **Head voltage swing = 4.2 Vp-p (min, open head)**
- **Rise/fall time of 1.5 ns 10-90% peak-to-peak (nom,  $L_H = 60$  nH,  $I_W = 60$  mA,  $R_{DAMP} = \text{none}$ )**
- **Damping resistor bonding options (150, 240, and 400  $\Omega$ )**
- **Write current range = 40 - 75 mA**
- **Write current gain of 20**
- **Write current constant of 40**
- **Power supply fault, write transition, no write current, and open head detection circuitry**
- **Open collector write unsafe WUS output**
- **PECL write data input**
- **Idle mode for fast write current turn-on ( $P_D = 28$  mW nom,  $I_W = 60$  mA)**
- **Sleep mode ( $P_D = 2$   $\mu$ W nom)**
- **Junction temperature diode**

## BLOCK DIAGRAM

