

# **Product Overview**

# LB1930MC: Motor Driver, Bidirectional, Low Voltage, Low Saturation

For complete documentation, see the data sheet

The LB1930MC is single-channel forward/reverse DC brush motor driver. This device is optimal for CD, DVD and Blue Ray Disk player loading motors. And it is possible to use it for others as a general-purpose product.

## **Features**

- The LB1930MC features the wide operating voltage range of 2.2 to 10.8V and the low standby current drain of 0.1A, and therefore can easily be used in battery operated systems.
- To minimize through currents, the LB1930MC internal logic passes through an internal standby state when switched by the input signals between forward/reverse and brake, or between forward and reverse.
- If the IC chip exceeds 180C due to an output short causing a large current flow, the built-in thermal protection circuit suppresses the drive current to prevent fires or destruction of the IC.
- Zero power consumption in standby mode
- The low saturation voltage reduces IC internal heating and allows a high voltage to be applied to the motor. Thus this device can be used even in environments with a high operating ambient temperature.
- There are no constraints on the relationship between the input voltage and the supply voltage. For example, the LB1930MC can be used with VCC = 3V, and VIN = 5V

#### **Benefits**

- · Low input voltage devices available 2V
- Rugged operation
- · Thermal protection
- Low Consumption

## **Applications**

- Industrial
- Consumer
- Portable & Wireless

#### **End Products**

- Digital Still Camera
- CD, DVD and Blue Ray Disk player loading motors.
- · Thermal printers, portable printers, scanner
- · Toy, Battery operate devices

| Part Electrical Specifications |                        |        |                           |                              |                               |                               |                           |                                      |                  |                      |      |                        |                               |                     |                     |
|--------------------------------|------------------------|--------|---------------------------|------------------------------|-------------------------------|-------------------------------|---------------------------|--------------------------------------|------------------|----------------------|------|------------------------|-------------------------------|---------------------|---------------------|
| Product                        | Compliance             | Status | V <sub>M</sub> Min<br>(V) | V <sub>M</sub><br>Max<br>(V) | V <sub>CC</sub><br>Min<br>(V) | V <sub>cc</sub><br>Max<br>(V) | I <sub>O</sub> Min<br>(A) | l <sub>o</sub><br>Peak<br>Max<br>(A) | Contro<br>I Type | Curren<br>t<br>Sense | ator | Fault<br>Detecti<br>on | Flybac<br>k<br>Protec<br>tion | R <sub>DS(on)</sub> | Packa<br>ge<br>Type |
| LB1930MC-AH                    | Pb-free<br>Halide free | Active | 2.2                       | 10.8                         | 2.2                           | 10.8                          |                           | 1                                    | Paralle<br>I     | None                 |      | Therm al               |                               |                     | SOIC-<br>10 NB      |

For more information please contact your local sales support at www.onsemi.com Created on: 4/29/2017