



## Product Overview

### STK681-320: Motor Driver, DC, Forward / Reverse, with Brush

For complete documentation, see the data sheet

#### Product Description

STK681-320 is a forward/reverse motor driver thick film hybrid IC. It is designed for current control of DC brush motors. It allows forward, reverse, and brake operations in accordance with the external input signal. The peak startup output current is 5.2A and the peak brake output current is 8A. It has current sensing resistor built-in, and we can space-saving design easily. And it obviates the need to design for the dead time in order to turn off the upper and lower drive devices when switching between the forward and reverse operation mode.

#### Features

- Built-in current sensing resistor
- Built-in over-heat protection
- Built-in over-current protection
- No need for dead time design

#### Benefits

- Fixed current control is possible
- Suppresses current drain when overheating state occurs
- The 50 $\mu$ s off time self-excitation chopping function
- Easy to safety design

#### Applications

- Computing & Peripherals
- Industrial

#### End Products

- Multi-Function Printer
- Slot machine
- Vending Machine

#### Part Electrical Specifications

| Product    | Compliance | Status | V <sub>M</sub> Min (V) | V <sub>M</sub> Max (V) | V <sub>CC</sub> Min (V) | V <sub>CC</sub> Max (V) | I <sub>O</sub> Min (A) | I <sub>O</sub> Peak Max (A) | Control Type | Current Sense    | Regulator Output | Fault Detection | Flyback Protection | R <sub>DS(on)</sub> (m $\Omega$ ) | Package Type |
|------------|------------|--------|------------------------|------------------------|-------------------------|-------------------------|------------------------|-----------------------------|--------------|------------------|------------------|-----------------|--------------------|-----------------------------------|--------------|
| STK681-320 | Pb-free    | Active |                        | 52                     | 4.75                    | 5.25                    | 5.2                    | 8                           | Parallel     | Fully Integrated | No               | Thermal         |                    |                                   | SIP-19       |

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