# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

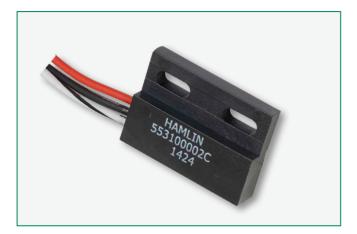
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





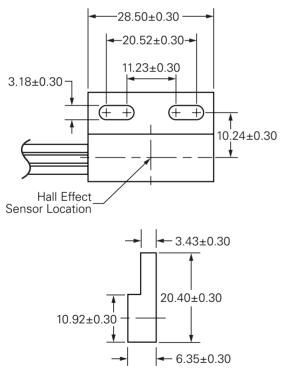
## 55310 Flat Pack Digital Hall Sensor





#### Dimensions

Dimensions in mm



#### Note

Standard actuators available pending application distance requirements. Consult Littelfuse.

#### **Description**

The Littelfuse 55310 absolute position sensor provides a digital output signal when activated by a magnet. The internal design of the sensor uses non-contact magnetic Hall effect technology. This sensor is immune to the performance limitations of the mechanical based products that are associated with mechanical wear or contamination.

The 55310 package design commonly finds applications within all types of vehicle and industrial segments and designed to operate in the harsh environments, the sensor has an operating temperature range between -40°C and 105°C. This unit incorporates automotive grade EMI/EMC and reverse battery polarity protection, as well as commercial grade 20 AWG-TXL automotive wire and the option of a Molex type sealed connector.

#### **Features**

- · Magnetically operated position sensor
- Unipolar digital hall switch

#### **Benefits**

- Custom connector, wire length options available. Consult Littelfuse
- High switching speed up to 10kHz

#### **Applications**

- Position sensing
- Limit sensing

#### **Customization Options**

Customized versions available. Contact Littelfuse for details.

- Connectors and terminals
- Wire type and length
- Magnetic actuators

• Long life - up to 20 billion operations

• Three-wire with open-drain output

• Reverse/over voltage protection

· Unaffected by harsh environments

• EMC protection

- Speed measurement
- · Magnetic encoders

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# 55310 Flat Pack Digital Hall Sensor

#### **Specifications**

| Hall Effect Device                           | Unipolar Digital Switch                       |                                    |                               |
|--|---|------------------------------------|-------------------------------|
| Operating Voltage                            | Recommended                                   | Vdc                                | 4.75 to 24.0                  |
| Over Voltage                                 | Absolute Max 1                                | Vdc                                | 30                            |
| Reverse Voltage Absolute Max 1               |   | Vdc                                | -20                           |
| Supply Current                               |   | mA - max.                          | 6                             |
| Output Current                               |   | mA - max.                          | 20                            |
| Sensor Actuation<br>with Magnetic South Pole | Operate (output low)<br>Release (output high) | Gauss - Typical<br>Gauss - Typical | 55<br>35                      |
| Switching Speed                              |   | kHz Max                            | 10                            |
| Temperature                                  | Operating                                     | °C                                 | -40 to +105                   |
| Pin Out                                      | Size<br>Insulation<br>Length                  | AWG<br>SAE<br>mm                   | 20<br>J-1128, Type TXL<br>300 |

Notes:

1. This is a stress rating only. Functional operation is not implied for additional load/life information.

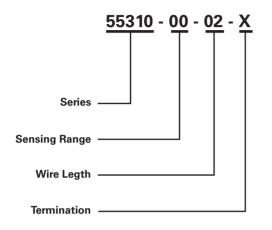
#### **Termination Options**

| Select<br>Option | Description                          | Color                 | Function   |
|------------------|--------------------------------------|-----------------------|--|
| A                | Stripped Leads                       | Black<br>White<br>Red | Ground<br>Signal<br>V (in)                                     |
| С                | Molex Connector MX 150<br>33481-0301 | Black<br>White<br>Red | Pin 1: Black/Ground<br>Pin 2: White/Signal<br>Pin 3: Red/V(in) |



### 55310 Flat Pack Digital Hall Sensor

#### Part Numbering System



#### Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|------------------|-------------------------|----------|---------------------------|--------------|
| Bulk             | Bulk                    | 500      | N/A                       | N/A          |