EW-752B

Shipped in bulk (500 pcs/Bag)

EW-752B is composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package.

Unipolar Hall Effect Switch
Supply Voltage 3~26.4V
Hall Element Continuous Excitation
Standard Sensitivity Bop: 6mT
Output With Pull-up Resistor
SIP

Notice: It is requested to read and accept "IMPORTANT NOTICE" written on the back of the front cover of this catalogue.

Operational Characteristics

- Marking
- Vout
- H
- Vsat
- Brp
- Bop
- Magnetic flux density

<table>
<thead>
<tr>
<th>Item</th>
<th>Symbol</th>
<th>Limit</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage</td>
<td>$V_{cc}$</td>
<td>26.4”</td>
<td>V</td>
</tr>
<tr>
<td>Output Voltage</td>
<td>$V_{Out}$</td>
<td>$V_{cc}$</td>
<td>V</td>
</tr>
<tr>
<td>Output L Current</td>
<td>I_{sink}</td>
<td>10</td>
<td>mA</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>$T_{opr}$</td>
<td>-40 ~ 115</td>
<td>°C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>$T_{stg}$</td>
<td>-40 ~ 125</td>
<td>°C</td>
</tr>
</tbody>
</table>

(*) Please refer to Supply Voltage Derating Curve.

Absolute Maximum Ratings (Ta=25°C)

- 1:Vcc
- Internal Pull-up Resistor
- 3:OUT
- 2:GND
- Hall Element
- Amplifier
- Schmitt Trigger
- Output Stage

Functional Block Diagram

Magnetic and Electrical Rating Characteristics (Ta=25°C)

<table>
<thead>
<tr>
<th>Item</th>
<th>Symbol</th>
<th>Conditions</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage</td>
<td>$V_{cc}$</td>
<td></td>
<td>3</td>
<td>12</td>
<td>26.4</td>
<td>V</td>
</tr>
<tr>
<td>Operating Point</td>
<td>$B_{Op}$</td>
<td>$V_{cc}=12V$</td>
<td>3</td>
<td>6</td>
<td>10</td>
<td>mT</td>
</tr>
<tr>
<td>Release Point</td>
<td>$B_{Rp}$</td>
<td>$V_{cc}=12V$</td>
<td>2.5</td>
<td>5</td>
<td>9.5</td>
<td>mT</td>
</tr>
<tr>
<td>Hysteresis</td>
<td>$B_{h}$</td>
<td>$V_{cc}=12V$</td>
<td>0.5</td>
<td>1.1</td>
<td>2.5</td>
<td>mT</td>
</tr>
<tr>
<td>Output Saturation Voltage</td>
<td>$V_{sat}$</td>
<td>$V_{cc}=12V,OUM'LL&quot;</td>
<td>0.4</td>
<td></td>
<td></td>
<td>V</td>
</tr>
<tr>
<td>Supply Current</td>
<td>$I_{cc}$</td>
<td>$V_{cc}=12V,OUM'H&quot;</td>
<td>5</td>
<td>6</td>
<td></td>
<td>mA</td>
</tr>
<tr>
<td>Output Down Voltage</td>
<td>$V_{d}$</td>
<td>$V_{cc}=12V,OUM'H&quot;</td>
<td>20</td>
<td></td>
<td></td>
<td>mV</td>
</tr>
<tr>
<td>Internal Load Resistance</td>
<td>$R_{L}$</td>
<td></td>
<td>7</td>
<td>10</td>
<td>13</td>
<td>kΩ</td>
</tr>
</tbody>
</table>

1 [mT]=10 [Gauss]
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● Package (Unit: mm)

Note) The sensor center is located within the φ0.3 mm circle.

● Temperature Dependence of Bop, Brp

● Supply Voltage Dependence of Bop, Brp
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June 2, 2010