EW-450

Shipped in packet-tape reel (5000pcs/Reel)

EW-450 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 | Hall Element Continuous Excitation | Low Sensitivity Bop: 1 OmT | Output Open Collector | SMT

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

Operational Characteristics

Absolute Maximum Ratings (Ta=25°C)

<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>18 V</td>
<td>V</td>
</tr>
<tr>
<td>Output H Voltage</td>
<td>$V_{off}$</td>
<td>$V_{CC}$</td>
<td>V</td>
</tr>
<tr>
<td>Output L Current</td>
<td>$I_{sink}$</td>
<td>15 mA</td>
<td>mA</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>$T_{opr}$</td>
<td>–20 ~ 115°C</td>
<td>°C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>$T_{stg}$</td>
<td>–40 ~ 125°C</td>
<td>°C</td>
</tr>
</tbody>
</table>

(*) Please refer to Supply Voltage Derating Curve.

Magnetic and Electrical 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>4.5</td>
<td>12</td>
<td>18</td>
<td>V</td>
</tr>
<tr>
<td>Operating Point</td>
<td>$B_{OP}$</td>
<td>$V_{CC}=12$V</td>
<td></td>
<td></td>
<td></td>
<td>mT</td>
</tr>
<tr>
<td>Release Point</td>
<td>$B_{RP}$</td>
<td>$V_{CC}=12$V</td>
<td>5</td>
<td></td>
<td></td>
<td>mT</td>
</tr>
<tr>
<td>Hysteresis</td>
<td>$B_{h}$</td>
<td>$V_{CC}=12$V</td>
<td>1.5</td>
<td></td>
<td></td>
<td>mT</td>
</tr>
<tr>
<td>Output Saturation Voltage</td>
<td>$V_{sat}$</td>
<td>$V_{CC}=12$V,OUT&quot;L&quot;,I Sink=10mA</td>
<td></td>
<td></td>
<td>0.4</td>
<td>V</td>
</tr>
<tr>
<td>Output Leakage Current</td>
<td>$I_{sat}$</td>
<td>$V_{CC}=12$V,OUT&quot;H&quot;,V_{out}=12$V</td>
<td></td>
<td></td>
<td>1</td>
<td>µA</td>
</tr>
<tr>
<td>Supply Current</td>
<td>$I_{CC}$</td>
<td>$V_{CC}=12$V,OUT&quot;H&quot;</td>
<td></td>
<td></td>
<td>8</td>
<td>mA</td>
</tr>
</tbody>
</table>

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

- Sensor center: 0.3
- 1.8
- 0.1

**Land Pattern (Unit:mm)**

- 0.90
- 1.00
- 0.70
- 0.70
- 4.00
- 1.30
- 1.30

**Notes**

1. The sensor center is located within the Ø0.3 mm circle.
2. The metal portions on the package side (support lead) are connected to the internal circuits. The support lead should be isolated from the external circuit and the other support lead.

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**Supply Voltage**

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**Temperature Dependence of Bop, Brp**

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**Supply Voltage Dependence of Bop, Brp**

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