New Product Announcement

AH3562Q/3Q/4Q

Grade 0 Automotive-Compliant Omnipolar Hall Switches Designed for Harsh Automotive Applications

AH356xQ are automotive-compliant, qualified to AEC-Q100 Grade 0, high-sensitivity omnipolar Hall effect switches that support PPAP documentation.

The AH356xQ has 3 sensitivity options with extremely tight switch points and best-in-class drift over temperature and supply voltage.

Their wide input voltage range of 3V to 28V, operating temperature range of -40 to +150°C coupled with a 32V reverse polarity protection enable them to withstand the harsh automotive environment.

Thanks to high ESD (8kV) and multiple protection functions, including input/output clamps, AH356xQ provide robust and rugged solutions for automotive proximity detection.

AH356xQ are available in industry standard SOT23 and SIP-3 packages.

The Diodes Advantage

AH356xQ are reliable and high-performance omnipolar Hall sensors for automotive applications.

- Precise and stable omnipolar Hall switch points
  Maintains integrity of switch and release points across all operating range ensuring correct system operation

- Wide operating voltage range, 3V to 28V
  Supports whole automotive battery range

- Wide (-40 to +150°C) operating temperature range
  Flexible solution for different automotive application conditions

- High ESD (8kV) and multiple protection functions
  Robust and rugged solution for automotive proximity detection

- Industry standard SOT23 and SIP-3 packages
  Ease of use and placement

Circuit Functions

- Position and Proximity Sensing in Automotive Applications
- Open and Close Detect
- Level Detect
- Contact-less switches
Typical Application Schematic

Open Drain

3.0V to 28V

VDD

RL

CIN

OUTPUT

GND

AH356xQ

Automotive-Compliant Omnipolar Switches

<table>
<thead>
<tr>
<th>Part</th>
<th>AECQ-100</th>
<th>Output Type</th>
<th>Operating Voltage (V)</th>
<th>Ave Supply (mA)</th>
<th>Reverse Protection</th>
<th>Current Limit</th>
<th>ESD HBM/CDM (kV)</th>
<th>Operating Point (Bop) (Gauss)</th>
<th>Release Point (Brp) (Gauss)</th>
<th>Temp Range (°C)</th>
<th>Package</th>
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<td>Grade 0</td>
<td>Open Drain</td>
<td>3 to 28</td>
<td>3</td>
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Ordering Information

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For more information:
AH3562Q: https://www.diodes.com/part/AH3562Q
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