



## New Small Signal 40 V Schottky and 100 V Switching Diodes Feature Ultra Compact DFN1006-2A Package With Wettable Flanks, Save Space and Improve Thermal Performance Over Diodes in Traditional SOD/T Packages

### Product Benefits:

- Offered in 1 mm by 0.6 mm by 0.45 mm DFN1006-2A package with wettable flanks
- Available in AEC-Q101 qualified versions
- Moisture sensitivity level (MSL) of 1 in accordance with J-STD-020
- UL 94 V-0 flammability rating
- RoHS-compliant, halogen-free, and [Vishay Green](#)
- Support automated optical inspection (AOI) for automotive systems
- Soldering can be checked by standard vision inspection; no X-ray is required



### Market Applications:

- Standard switching and Schottky diodes for automotive and industrial applications

### The News:

Vishay Intertechnology introduces new surface-mount small signal diodes in the ultra compact DFN1006-2A plastic package with wettable flanks. Designed to save space and improve thermal performance in automotive and industrial applications, the 40 V BAS40L Schottky and 100 V BAS16L switching diodes are each available in AEC-Q101 qualified versions.

- The diodes occupy 90 % less board space than devices in traditional SOD/T packages, while offering a 50 % lower profile and better power dissipation
- For protection against excessive voltage, such as electrostatic discharges, the BAS40L features a PN junction guard ring

### The Key Specifications:

Part number	Package	Type	I <sub>F</sub> (A)	V <sub>R</sub> (V)	I <sub>FSM</sub> (A)	V <sub>F</sub> at I <sub>F</sub> and T <sub>J</sub>			T <sub>J</sub> max (°C)	AEC-Q101
						V <sub>F</sub> (V)	I <sub>F</sub> (A)	T <sub>A</sub> (°C)		
BAS16L-G3-08	DFN1006-2A	Switching	0.25	100	1.7 (@ 1 ms)	0.86	0.01	25	150	No
BAS16L-HG3-08	DFN1006-2A	Switching	0.25	100	1.7 (@ 1 ms)	0.86	0.01	25	150	Yes
BAS40L-G3-08	DFN1006-2A	Schottky	0.2	40	0.5 (@ 10 ms)	0.56	0.01	25	150	No
BAS40L-HG3-08	DFN1006-2A	Schottky	0.2	40	0.5 (@ 10 ms)	0.56	0.01	25	150	Yes



## NEW PRODUCT INFORMATION



**Product Group:** Vishay Diodes Group, Small Signal Diodes / **October** 2021

### **Availability:**

Samples and production quantities of the BAS40L and BAS16L are available now, with lead times of 12 weeks for large orders.

To access the product datasheets on the Vishay Website, go to

<http://www.vishay.com/ppg?86187> (BAS16L)

<http://www.vishay.com/ppg?86189> (BAS40L)

### **Contact Information:**

#### **The Americas**

[Diodes-Americas@vishay.com](mailto:Diodes-Americas@vishay.com)

#### **Europe**

[Diodes-Europe@vishay.com](mailto:Diodes-Europe@vishay.com)

#### **Asia/Pacific**

[Diodes-Asia@vishay.com](mailto:Diodes-Asia@vishay.com)