



Vishay Intertechnology Standard Rectifiers Deliver High Current Ratings to 12 A in New Power DFN Series DFN6546A Package

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Featuring Low 0.88 mm Profile and Wettable Flanks, 200 V, 400 V, and 600 V Devices Provide Improved Thermal Performance and Forward Surge Capability

MALVERN, Pa., Sept. 15, 2026 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today introduced four new series of surface-mount standard rectifiers that are the industry's first such devices in the low profile DFN6546A package with wettable flanks. Providing space-saving solutions for power line polarity protection and rail to rail protection in commercial, industrial, and automotive applications, the 5 A SE50N6x, 8 A SE80N6x, 10 A SE100N6x, and 12 A SE120N6x are each available with reverse voltages of 200 V, 400 V, and 600 V, and are offered in AEC-Q101 qualified versions.

The latest package in Vishay's new Power DFN family, the DFN6546A features a compact 6.5 mm by 4.6 mm footprint and an extremely low typical height of 0.88 mm, allowing the Vishay General Semiconductor rectifiers released today to make more efficient use of PCB space. At the same time, the devices' advanced construction and die placement technology allow for a higher copper content and larger chip sizes, resulting in improved thermal performance, higher current ratings, and forward surge current capability. Compared to solutions in the SMPC (TO-277A) package with the same footprint, the SE50N6x, SE80N6x, SE100N6x, and SE120N6x deliver a 10 % lower profile, 20 % higher current ratings, and 82 % higher forward surge capability.

Featuring an oxide planar chip junction design, the rectifiers offer typical reverse leakage current less than 0.1 μ A, while their low forward voltage drops down to 0.77 V reduces power losses to improve efficiency. The devices operate over a wide temperature range from -55 °C to +175 °C, and provide ESD capability in compliance with IEC 61000-4-2, air discharge mode. The wettable flanks of their DFN6546A package allow for automatic optical inspection (AOI), eliminating the need for an X-ray inspection. Ideal for automated placement, the rectifiers offer an MSL moisture sensitivity level of 1, per J-STD-020, LF maximum peak of 260 °C. The devices are RoHS-compliant and halogen-free.

Device Specification Table:

Part #	I _{F(AV)} (A)	V _{RRM} (V)	I _{FSM} (A)	V _F at I _F and T _J			T _J max. (°C)	Package
				V _F (V)	I _F (A)	T _A (°C)		
SE50N6D	5	200	240	0.77	5	125	175	DFN6546A
SE50N6G	5	400	240	0.77	5	125	175	DFN6546A
SE50N6J	5	600	240	0.77	5	125	175	DFN6546A
SE80N6D	8	200	240	0.82	8	125	175	DFN6546A
SE80N6G	8	400	240	0.82	8	125	175	DFN6546A
SE80N6J	8	600	240	0.82	8	125	175	DFN6546A
SE100N6D	10	200	300	0.83	10	125	175	DFN6546A
SE100N6G	10	400	300	0.83	10	125	175	DFN6546A
SE100N6J	10	600	300	0.83	10	125	175	DFN6546A
SE120N6D	12	200	320	0.84	12	125	175	DFN6546A
SE120N6G	12	400	320	0.84	12	125	175	DFN6546A
SE120N6J	12	600	320	0.84	12	125	175	DFN6546A

Samples and production quantities of the new surface-mount standard rectifiers in the DFN6546A package are available now, with lead times of eight weeks.

Vishay manufactures one of the world's largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets. Serving customers worldwide, Vishay is **The DNA of tech.**® Vishay Intertechnology, Inc. is a Fortune 1000 Company listed on the NYSE (VSH). More on Vishay at www.vishay.com.

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Links to product datasheets:

<http://www.vishay.com/ppg?98743> (SE50N6D, SE50N6G, SE50N6J)

<http://www.vishay.com/ppg?98744> (SE80N6D, SE80N6G, SE80N6J)

<http://www.vishay.com/ppg?98727> (SE100N6D, SE100N6G, SE100N6J)

<http://www.vishay.com/ppg?98745> (SE120N6D, SE120N6G, SE120N6J)

Link to product photo:

<https://www.flickr.com/photos/vishay/albums/72177720335563596>

For more information please contact:

Vishay Interotechnology

Peter Henrici, +1 408 567-8400

peter.henrici@vishay.com

or

Redpines

Bob Decker, +1 415 409-0233

bob.decker@redpinesgroup.com